## SEARCH REQUEST FORM

Scientific and Technical Information Center

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please seach the claim orthand.

Vendors and cost where applicable Type of Search NA Sequence (#) AA Sequence (#) Dialog Searcher Phone #: Structure (#) Questel/Orbit Searcher Location: Date Searcher Picked Up Bibliographic Dr.Link Lexis/Nexis Litigation Searcher Prep & Review Time: Fulltext ~ Sequence Systems

WWW/Internet

Other (specify)\_

Patent Family

Other

PTO-1590 (8-01)

Clerical Prep Time;

Online Time:

PENG 10/031612 Page 1

1

=> file reg
FILE 'REGISTRY' ENTERED AT 11:45:20 ON 16 APR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 APR 2003 HIGHEST RN 503084-53-5 DICTIONARY FILE UPDATES: 15 APR 2003 HIGHEST RN 503084-53-5

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

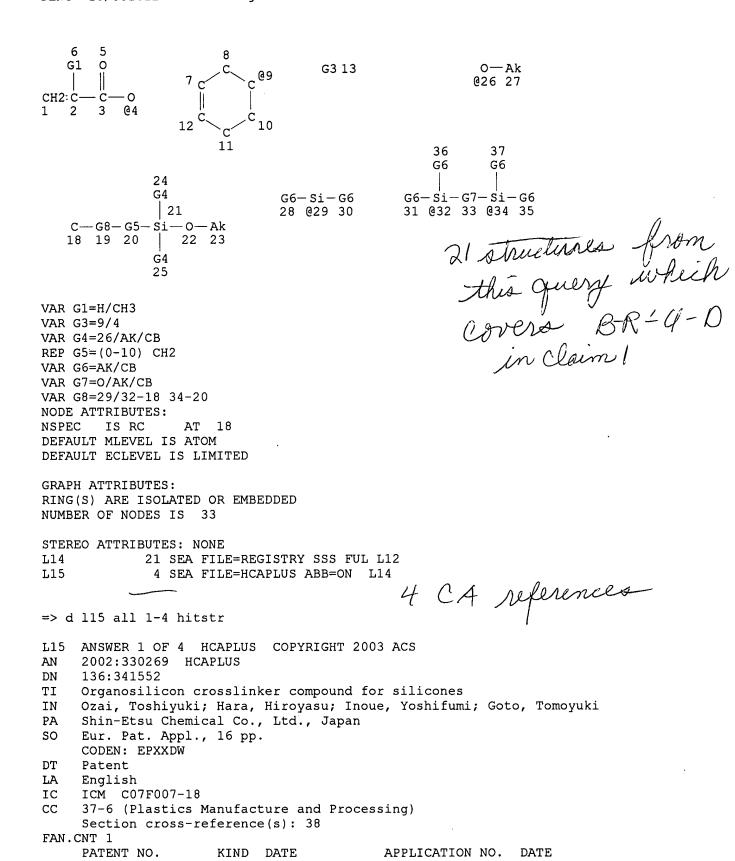
=> file hcaplus FILE 'HCAPLUS' ENTERED AT 11:45:25 ON 16 APR 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 16 Apr 2003 VOL 138 ISS 16 FILE LAST UPDATED: 15 Apr 2003 (20030415/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que L12 STR



```
PΙ
     EP 1201672
                       A2
                            20020502
                                           EP 2001-125522
                                                            20011025
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                      A2
                            20020509
                                          JP 2000-327558
                                                            20001026
     US 2002099232
                                           US 2001-983933
                       Α1
                            20020725
                                                            20011026
PRAI JP 2000-327558
                            20001026
                       Α
     MARPAT 136:341552
     An organosilicon compd. has a structure (HR1C:CR2CO2Z1)3-
AΒ
     mSi(R3)mZ2Si(R3)nX3-n, where R1 = H, Ph or a halogenated Ph; R2 = H or Me;
     R3's = substituted or unsubstituted monovalent hydrocarbon group having
     1-10 C atoms; X = hydrolyzable group; Z1 = R4, R4O or R4Me2SiO, where R4 =
     substituted or unsubstituted divalent hydrocarbon group having 1-10 C
     atoms; Z2 = O or a substituted or unsubstituted divalent hydrocarbon group
     having 1-10 C atoms; and m = 0, 1 or 2 and n = 0, 1 or 2. When
     incorporated in silicone compns., the organosilicon compd. acts as a
     crosslinking agent having well-balanced photopolymerizability and
     condensation curability. Thus, 1-methylbis(2-methacryloxyethoxy)sily1-2-
     triisopropenoxysilylethane, prepn. given, may be used to cure
     hydroxy-terminated siloxane by UV light and high humidity.
ST
     photo moisture curing agent organosilicon; methacryloxyethoxysilyl
     triisopropenoxysilylethane curing agent
IT
     Adhesives
        (dual curing; organosilicon crosslinker compd. for photo- and
        moisture-curing silicones)
IT
     Crosslinking agents
        (organosilicon crosslinker compd. for photo- and moisture-curing
        silicones)
TT
     Polysiloxanes, uses
     RL: RCT (Reactant); TEM (Technical or engineered material use); RACT
     (Reactant or reagent); USES (Uses)
        (organosilicon crosslinker compd. for photo- and moisture-curing
        silicones)
IT
     419548-79-1P
                    419548-80-4P
                                   419548-81-5P
                                                  419548-82-6P
                                                                 419548-83-7P
     419548-84-8P
                    419548-85-9P
                                   419548-86-0P
                                                  419548-87-1P
                                                                 419548-88-2P
                  419548-90-6P
     419548-89-3P
                                   419548-91-7P 419548-92-8P
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
     (Reactant or reagent)
        (crosslinker; organosilicon crosslinker compd. for photo- and
        moisture-curing silicones)
IT
     75-54-7, Dichloromethylsilane
                                     681-84-5, Tetramethoxysilane
     2-Hydroxyethyl acrylate 868-77-9, 2-Hydroxyethyl methacrylate
     1066-35-9, Dimethylchlorosilane 2768-02-7, Vinyltrimethoxysilane
     9016-00-6, Dimethylsilanediol homopolymer, sru 15332-99-7,
                                  31900-57-9, Dimethylsilanediol homopolymer
     Vinyltriisopropenoxysilane
     118536-45-1
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (organosilicon crosslinker compd. for photo- and moisture-curing
        silicones)
IT
     419548-92-8P
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
     (Reactant or reagent)
        (crosslinker; organosilicon crosslinker compd. for photo- and
        moisture-curing silicones)
     419548-92-8 HCAPLUS
RN
CN
     2-Propenoic acid, [1,1,3,3-tetramethyl-3-[2-[tris[(1-
    methylethenyl)oxy]silyl]ethyl]disiloxanyl]methyl ester (9CI) (CA INDEX
```

NAME)

```
ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2003 ACS
T.15
     2001:62280 HCAPLUS
AN
     134:136746
DN
     Hydrolyzable and polymerizable silanes with low viscosity and their use as
ΤI
     dental materials
IN
     Bissinger, Peter; Gasser, Oswald; Guggenberger, Rainer; Soglowek, Wolfgang
PΑ
     ESPE Dental A.-G., Germany
                                                         applicants
so
     Ger. Offen., 20 pp.
     CODEN: GWXXBX
DT
     Patent
LΑ
     German
IC
     ICM C07F007-18
     ICS C08L083-04; A61K006-08
CC
     63-7 (Pharmaceuticals)
     Section cross-reference(s): 29, 35
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
                     ____
                                           -----
                                           DE 1999-19934407 19990722
PΙ
     DE 19934407
                      A1
                            20010125
     WO 2001007444
                            20010201
                                           WO 2000-EP6639 20000712
                      A1
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1202997
                      A1
                            20020508
                                         EP 2000-951376 20000712
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
     JP 2003505557
                      Т2
                            20030212
                                           JP 2001-512528
                                                            20000712
PRAI DE 1999-19934407
                      Α
                            19990722
     WO 2000-EP6639
                      W
                            20000712
AΒ
     The silanes have the structure Q(YdR'ZR'SiXaRb)c [Q = C4-50 org. residue
     contg. .gtoreq.1 C-C double bond; R = alkyl, alkenyl, aryl, aralkyl,
     alkaryl; R' = direct link, C1-10 hydrocarbylene, optionally interrupted by
     O, S, and/or NH; X = H, halogen, OH, alkoxy, acyloxy, acyl,
     alkoxycarbonyl, NR12 (R1 = H, alkyl, aryl); Y = O, S, CO, CO2, OCC2, OCC2,
     CONR1, NR1CO; Z = modified org. residue contg. Si or Ge; a = 1-3; b = (3 - 1)
     a); c = 1-4; d = 0, 1]. Thus, hydrosilylation of 2-(allyloxy)ethyl
     methacrylate with 1,1,3,3-tetramethyl-1-[2-(trimethoxysilyl)ethyl]disiloxa
     ne gave CH2: CMeCO2(CH2)2O(CH2)3SiMe2OSiMe2(CH2)2Si(OMe)3 in 98% yield,
     which could be hydrolytically homopolymd. in 96% yield or copolymd. with
```

۶

```
Si(OMe)4 in 95% yield.
ST
     hydrolytically polymerizable silane dental material; unsatd hydrolyzable
     silane dental material
IT
     Adhesives
     Dental materials and appliances
     Sealing compositions
        (prepn. of hydrolyzable and polymerizable silanes with low viscosity
        as)
     Hydrosilylation
IT
        (prepn. of hydrolyzable and polymerizable silanes with low viscosity as
        dental materials)
ΙT
     Crosslinking
        (radical; of hydrolyzed polymerizable silanes with low viscosity for
        dental materials)
IT
     321861-59-0P 321861-61-4P 321861-68-1P
     321861-69-2P 321861-72-7P 321861-73-8P
     321861-75-0P 321861-76-1P 321861-79-4P
     321861-80-7P
     RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (hydrolyzable and polymerizable silanes with low viscosity as dental
        materials)
IT
     321861-57-8P 321861-67-0P 321861-71-6P
     321861-74-9P 321861-77-2P 321861-78-3P
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
     (Reactant or reagent)
        (prepn. of hydrolyzable and polymerizable silanes with low viscosity as
        dental materials)
IT
     3048-64-4, 5-Vinyl-2-norbornene
                                       16839-48-8, 2-(Allyloxy)ethyl
                    19778-85-9, Trimethylolethane triacrylate 137407-65-9,
     methacrylate
     1,1,3,3-Tetramethyl-1-[2-(trimethoxysilyl)ethyl]disiloxane 158612-33-0,
     1-[2-(Dimethoxymethylsilyl)ethyl]-1,1,3,3-tetramethyldisiloxane
     321861-63-6
                   321861-65-8
                                321861-70-5, Methylphenyl[2-
     (trimethoxysilyl)ethyl]silane
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (prepn. of hydrolyzable and polymerizable silanes with low viscosity as
        dental materials)
RE.CNT 4
             THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Anon; DE 19730515 A1 HCAPLUS
(2) Anon; DE 19736665 A1 HCAPLUS
(3) Anon; DE 4339399 A1 HCAPLUS
(4) Anon; DE 4433139 A1 HCAPLUS
ΙT
     321861-59-0P 321861-61-4P 321861-68-1P
     321861-69-2P 321861-72-7P 321861-73-8P
     321861-75-0P 321861-76-1P 321861-79-4P
     321861-80-7P
     RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (hydrolyzable and polymerizable silanes with low viscosity as dental
        materials)
     321861-59-0 HCAPLUS
RN
    2-Propenoic acid, 2-methyl-, 12,12-dimethoxy-7,7,9,9-tetramethyl-3,8,13-
     trioxa-7,9,12-trisilatetradec-1-yl ester, homopolymer (9CI) (CA INDEX
     NAME)
```

CM 1

PENG 10/031612

Page 6

CRN 321861-57-8 CMF C18 H40 O7 Si3

RN 321861-61-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 12,12-dimethoxy-7,7,9,9-tetramethyl-3,8,13-trioxa-7,9,12-trisilatetradec-1-yl ester, polymer with silicic acid (H4SiO4) tetramethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 321861-57-8 CMF C18 H40 O7 Si3

CM 2

CRN 681-84-5 CMF C4 H12 O4 Si

RN 321861-68-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-(12,12-dimethoxy-6,6,9,9-tetramethyl-2,13-dioxa-6,9,12-trisilatetradec-1-yl)-1,2-ethanediyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 321861-67-0 CMF C25 H50 O8 Si3

PAGE 1-A

PAGE 1-B

- OMe

RN 321861-69-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 14,14-dimethoxy-8,8,11,11-tetramethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-4,15-dioxa-8,11,14-trisilahexadec-1-yl ester, polymer with silicic acid (H4SiO4) tetramethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 321861-67-0 CMF C25 H50 O8 Si3

PAGE 1-A

O CH2

|| ||
H2C O O-C-C-Me Me Me OMe

|| || ||
Me-C-C-O-CH2-CH-CH2-O-(CH2)3-Si-CH2-CH2-Si-CH2-CH2-Si| Me Me OMe

PAGE 1-B

--- OMe

CM 2

CRN 681-84-5 CMF C4 H12 O4 Si PENG 10/031612

Page 8

RN 321861-72-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-(9,9-dimethoxy-6,6-dimethyl-2,10-dioxa-6,9-disilaundec-1-yl)-1,2-ethanediyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 321861-71-6 CMF C26 H42 O8 Si2

RN 321861-73-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 10,10-dimethoxy-7-methyl-1-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-7-phenyl-3,11-dioxa-7,10-disiladodec-1-yl ester, polymer with silicic acid (H4SiO4) tetramethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 321861-71-6 CMF C26 H42 O8 Si2

CM 2

CRN 681-84-5 CMF C4 H12 O4 Si

RN 321861-75-0 HCAPLUS

CN Disiloxane, 1-(2-bicyclo[2.2.1]hept-5-en-2-ylethyl)-1,1,3,3-tetramethyl-3-[2-(trimethoxysilyl)ethyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 321861-74-9 CMF C18 H38 O4 Si3

RN 321861-76-1 HCAPLUS

CN Silicic acid (H4SiO4), tetramethyl ester, polymer with 1-(2-bicyclo[2.2.1]hept-5-en-2-ylethyl)-1,1,3,3-tetramethyl-3-[2-(trimethoxysilyl)ethyl]disiloxane (9CI) (CA INDEX NAME)

CM 1

CRN 321861-74-9 CMF C18 H38 O4 Si3

CM 2

CRN 681-84-5 CMF C4 H12 O4 Si

RN 321861-79-4 HCAPLUS

CN 2-Propenoic acid, 2-(11-methoxy-6,6,8,8,11-pentamethyl-3-oxo-2,7,12-trioxa-6,8,11-trisilatridec-1-yl)-2-methyl-1,3-propanediyl ester, polymer with 13-methoxy-2-(11-methoxy-6,6,8,8,11-pentamethyl-3-oxo-2,7,12-trioxa-6,8,11-trisilatridec-1-yl)-2,8,8,10,10,13-hexamethyl-5-oxo-4,9,14-trioxa-8,10,13-trisilapentadec-1-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 321861-78-3 CMF C32 H70 O12 Si6

PAGE 1-A

OME Me Me O CH2-O-C-CH2-CH2
Me-Si-CH2-CH2-Si-O-Si-CH2-CH2-C-O-CH2-C-Me O
OME Me Me Me CH2-O-C-CH=-CH2

PAGE 1-B

CM 2

CRN 321861-77-2 CMF C23 H44 O9 Si3

PAGE 1-B

— ме

PENG 10/031612 Page 11

RN 321861-80-7 HCAPLUS

CN 2-Propenoic acid, 2-(11-methoxy-6,6,8,8,11-pentamethyl-3-oxo-2,7,12-trioxa-6,8,11-trisilatridec-1-yl)-2-methyl-1,3-propanediyl ester, polymer with 13-methoxy-2-(11-methoxy-6,6,8,8,11-pentamethyl-3-oxo-2,7,12-trioxa-6,8,11-trisilatridec-1-yl)-2,8,8,10,10,13-hexamethyl-5-oxo-4,9,14-trioxa-8,10,13-trisilapentadec-1-yl 2-propenoate and silicic acid (H4SiO4) tetramethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 321861-78-3 CMF C32 H70 O12 Si6

PAGE 1-A

OME

OME

Me Me

O

CH2-O-C-CH2-CH2
Me-Si-CH2-CH2-Si-O-Si-CH2-CH2-C-O-CH2-C-Me

OME

Me Me

OME

Me

CH2-O-C-CH=CH2

PAGE 1-B

CM 2

CRN 321861-77-2 CMF C23 H44 O9 Si3

PAGE 1-B

— Ме

CM 3

CRN 681-84-5 CMF C4 H12 O4 Si

## IT 321861-57-8P 321861-67-0P 321861-71-6P 321861-74-9P 321861-77-2P 321861-78-3P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of hydrolyzable and polymerizable silanes with low viscosity as dental materials)

RN 321861-57-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 12,12-dimethoxy-7,7,9,9-tetramethyl-3,8,13-trioxa-7,9,12-trisilatetradec-1-yl ester (9CI) (CA INDEX NAME)

RN 321861-67-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-(12,12-dimethoxy-6,6,9,9-tetramethyl-2,13-dioxa-6,9,12-trisilatetradec-1-yl)-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

PAGE 1-B

-- OMe

RN 321861-71-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-(9,9-dimethoxy-6-methyl-6-phenyl-2,10-dioxa-6,9-disilaundec-1-yl)-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

RN 321861-74-9 HCAPLUS

CN Disiloxane, 1-(2-bicyclo[2.2.1]hept-5-en-2-ylethyl)-1,1,3,3-tetramethyl-3-[2-(trimethoxysilyl)ethyl]- (9CI) (CA INDEX NAME)

RN 321861-77-2 HCAPLUS

CN 2-Propenoic acid, 2-(11-methoxy-6,6,8,8,11-pentamethyl-3-oxo-2,7,12-trioxa-6,8,11-trisilatridec-1-yl)-2-methyl-1,3-propanediyl ester (9CI) (CA INDEX NAME)

PAGE 1-B

— ме

RN 321861-78-3 HCAPLUS

CN 2-Propenoic acid, 13-methoxy-2-(11-methoxy-6,6,8,8,11-pentamethyl-3-oxo-2,7,12-trioxa-6,8,11-trisilatridec-1-yl)-2,8,8,10,10,13-hexamethyl-5-oxo-4,9,14-trioxa-8,10,13-trisilapentadec-1-yl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

L15 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2003 ACS

AN 1995:778604 HCAPLUS

DN 123:340246

TI Palladium-tert-alkyl isocyanide catalyzed intramolecular bis-silylation of vicinally disubstituted alkenes

AU Suginome, Michinori; Matsumoto, Akira; Nagata, Koichi; Ito, Yoshihiko

CS Department of Synthetic Chemistry and Biological Chemistry, Faculty of Engineering, Kyoto University, Kyoto, 606-01, Japan

SO Journal of Organometallic Chemistry (1995), 499(1-2), C1-C3 CODEN: JORCAI; ISSN: 0022-328X

PB Elsevier

DT Journal

LA English

CC 29-6 (Organometallic and Organometalloidal Compounds)

GI

AB Intramol. bis-silylation of (Z)- and (E)-alkenes tethered to disilanyl groups by ether linkage -CH2CH2O-, e.g., I, proceeded with stereospecific cis-addn. to give 5-exo ring-closure products. Ph substituents on the Si atom proximal to the ether O were crucial for the successful bis-silylation reaction. NMR study of a stoichiometric reaction of disilanyl alkenes with bis(tert-alkyl isocyanide)palladium(O) complex showed that facile formation of an intermediate of bis(silyl)palladium(II) complexes may det. the obsd. high reactivity in the catalytic reaction. Disilanyl ethers derived from (Z)- and (E)-2-methyl-3-hexen-1-ol gave

ST

IT

IT

IT

ΙT

IT

IΤ

IT

IT

ΙT

IT

Page 15 trans-3,4-disubstituted 2-silatetrahydrofurans, e.g., II, and those derived from (Z)- and (E)-4-hepten-2-ol gave cis-3,5-disubstituted 2-silatetrahydrofurans selectively. Application to stereoselective synthesis of triols was demonstrated by H2O2 oxidn. of the cyclic products with retention of stereochem. at the Si substituted carbons. stereoselective cycloaddn alkenyloxydisilane; silylation intramol stereoselective alkenyloxydisilane; palladium isocyanide catalyst stereoselective cycloaddn alkenyloxydisilane; silafuran chiral; oxasilacyclopentane chiral Stereochemistry (prepn. of chiral silatetrahydrofurans by palladium-tert-alkyl isocyanide catalyzed intramol. silylation of vicinally disubstituted Alkenes, reactions RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. of chiral silatetrahydrofurans by palladium-tert-alkyl isocyanide catalyzed intramol. silylation of vicinally disubstituted alkenes) Silylation (stereoselective, bis-; prepn. of chiral silatetrahydrofurans by palladium-tert-alkyl isocyanide catalyzed intramol. silylation of vicinally disubstituted alkenes) Cycloaddition reaction Cycloaddition reaction catalysts (stereoselective, prepn. of chiral silatetrahydrofurans by palladium-tert-alkyl isocyanide catalyzed intramol. silylation of vicinally disubstituted alkenes) 170654-97-4 170654-98-5 170654-99-6 RL: RCT (Reactant); RACT (Reactant or reagent) (attempted; prepn. of chiral silatetrahydrofurans by palladium-tert-alkyl isocyanide catalyzed intramol. silylation of vicinally disubstituted alkenes) 70223-83-5P 170654-96-3P RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of) 3375-31-3, Palladium diacetate 14542-93-9, 1,1,3,3-Tetramethylbutyl isocyanide 22110-53-8 RL: CAT (Catalyst use); USES (Uses) (prepn. of chiral silatetrahydrofurans by palladium-tert-alkyl isocyanide catalyzed intramol. silylation of vicinally disubstituted alkenes) 170655-00-2 170655-01-3 170655-02-4 170655-03-5 170655-04-6 170655-06-8 170655-07-9 170655-08-0 170655-09-1 170655-05-7 170655-10-4 **170655-11-5 170655-12-6** 170655-13-7 RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. of chiral silatetrahydrofurans by palladium-tert-alkyl isocyanide catalyzed intramol. silylation of vicinally disubstituted alkenes) 170654-91-8P 170654-94-1P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of chiral silatetrahydrofurans by palladium-tert-alkyl

isocyanide catalyzed intramol. silylation of vicinally disubstituted

170654-88-3P

170654-95-2P

170899-73-7P

170654-89-4P

170899-69-1P

170654-87-2P

170654-93-0P

170899-72-6P

170654-86-1P

170654-92-9P

170899-71-5P

alkenes)

170654-85-0P

170654-90-7P

170899-70-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of chiral silatetrahydrofurans by palladium-tert-alkyl isocyanide catalyzed intramol. silylation of vicinally disubstituted alkenes)

IT 170655-11-5 170655-12-6 170655-13-7

RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of chiral silatetrahydrofurans by palladium-tert-alkyl
 isocyanide catalyzed intramol. silylation of vicinally disubstituted
 alkenes)

RN 170655-11-5 HCAPLUS

CN Disilane, 1-(2-cyclohexen-1-ylmethoxy)-1,1,2,2-tetramethyl-2-phenyl- (9CI) (CA INDEX NAME)

RN 170655-12-6 HCAPLUS

CN Disilane, 1-(2-cyclohexen-1-ylmethoxy)-1,1,2,2-tetramethyl-2-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 170655-13-7 HCAPLUS

CN Disilane, 1-(2-cyclohexen-1-ylmethoxy)-2,2-dimethyl-1,1,2-triphenyl- (9CI) (CA INDEX NAME)

L15 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2003 ACS

AN 1995:478118 HCAPLUS

DN 122:215601

TI Modifier compositions for improving mechanical properties and water resistance of composite materials, and composite materials using the same

IN Yanagisawa, Hideyoshi; Yamatani, Masaaki

PA Shinetsu Chem Ind Co, Japan

PENG 10/031612 Page 17

```
SO Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
```

IC ICM C08L083-07 ICS C08L083-07; C08K003-00; C08L033-04; C08L067-06

CC 37-6 (Plastics Manufacture and Processing)

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

-----PI JP 06228439 A2 19940816 JP 1993-37555 19930201
PRAI JP 1993-37555 19930201

AB The title compns. contain mainly siloxanes CH2:CR1CO2R2SiMe3-k[(OSiMe2)nR3Si(Me)3-1(OR)1]k (R1 = H, Me; R2 = divalent hydrocarbon group; R3 = C.gtoreq.2 divalent hydrocarbon group; R4 = C1-4 hydrocarbyl; n.gtoreq.3; k = 1, 2; l = 2, 3). A glass cloth was impregnated with a toluene soln. of CH2:CMeCO2(CH2)3Me2Si(OSiMe2)22CH:CH2, heated at 110.degree. for 5 min, impregnated with an unsatd. polyester varnish, and heated at 150.degree. for 1 h to give a composite with bending strength 48 kg/mm2 initially and 43 kg/mm2 after boiled.

ST siloxane modifier unsatd polyester composite

IT Acrylic polymers, uses

Glass fibers, uses

Mica-group minerals, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(modifier compns. for improving mech. properties and water resistance of composite materials, and composite materials using the same)

IT Polyesters, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(unsatd., modifier compns. for improving mech. properties and water resistance of composite materials, and composite materials using the same)

IT 31900-57-9DP, Dimethylsilanediol homopolymer,

dimethyl(methacryloyloxypropyl)silyl- and dimethylvinylsilyl-terminated 119686-45-2P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(modifier compns. for improving mech. properties and water resistance of composite materials, and composite materials using the same)

IT 159265-78-8P 162080-65-1P 162080-66-2P 162080-67-3P

## 162080-68-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(modifier compns. for improving mech. properties and water resistance of composite materials, and composite materials using the same)

TT 7631-86-9, Silica, uses 21645-51-2, Aluminum hydroxide, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material
use); USES (Uses)

(modifier compns. for improving mech. properties and water resistance of composite materials, and composite materials using the same)

541-05-9, Hexamethylcyclotrisiloxane 3959-12-4 24636-31-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(modifier compns. for improving mech. properties and water resistance of composite materials, and composite materials using the same)

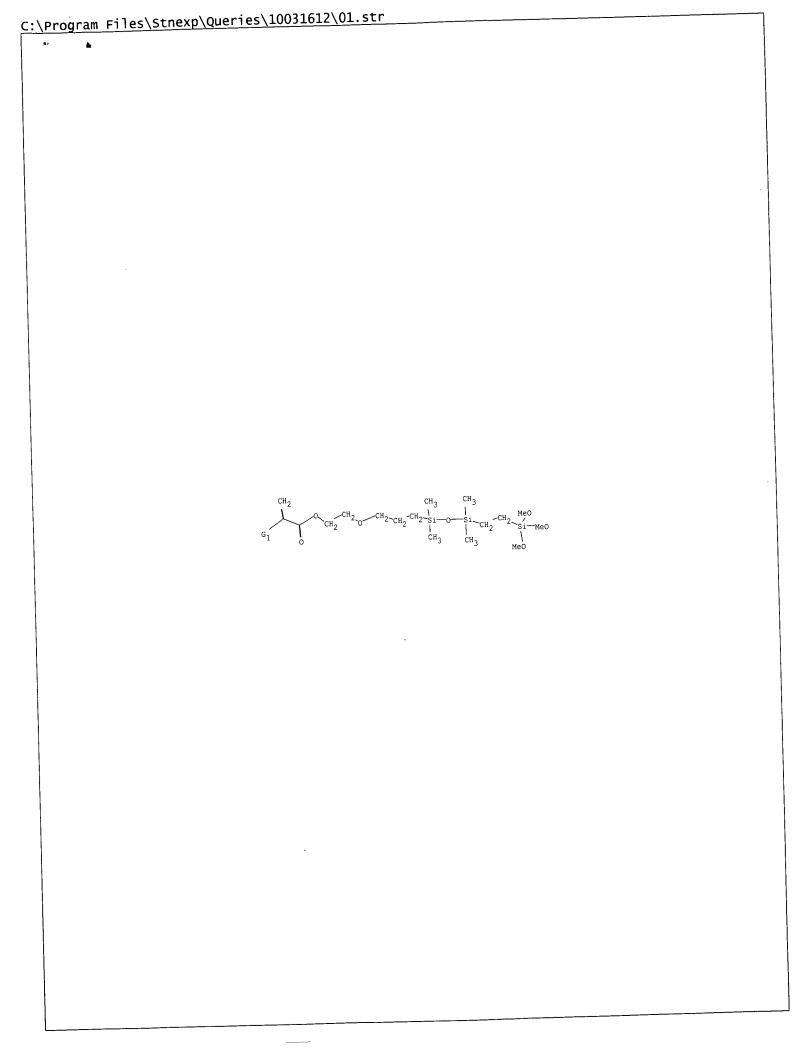
## IT 162080-68-4P

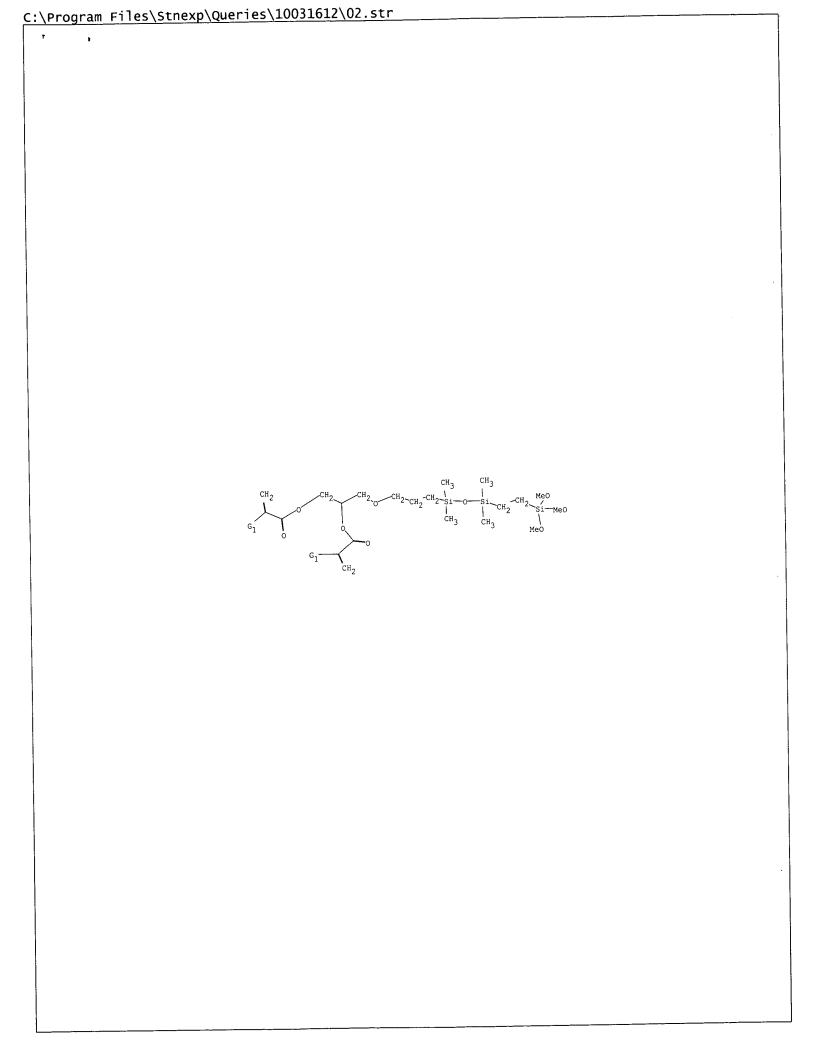
ΙT

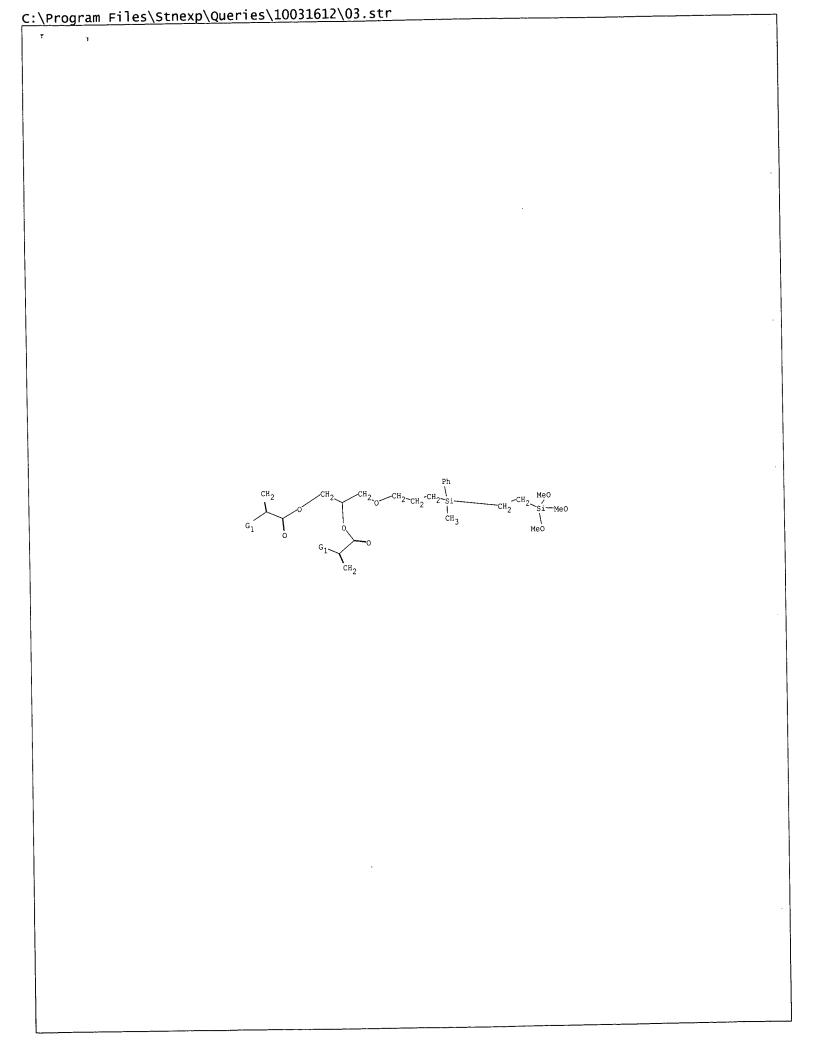
RL: IMF (Industrial manufacture); TEM (Technical or engineered material

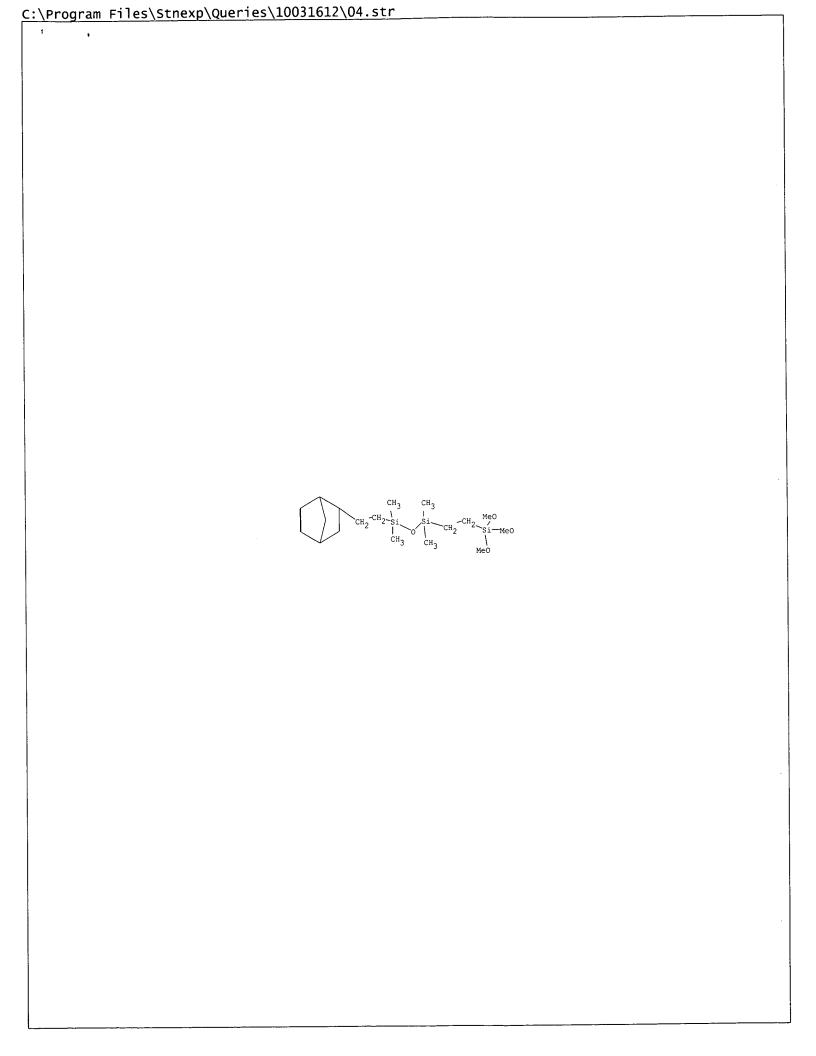
PENG 10/031612

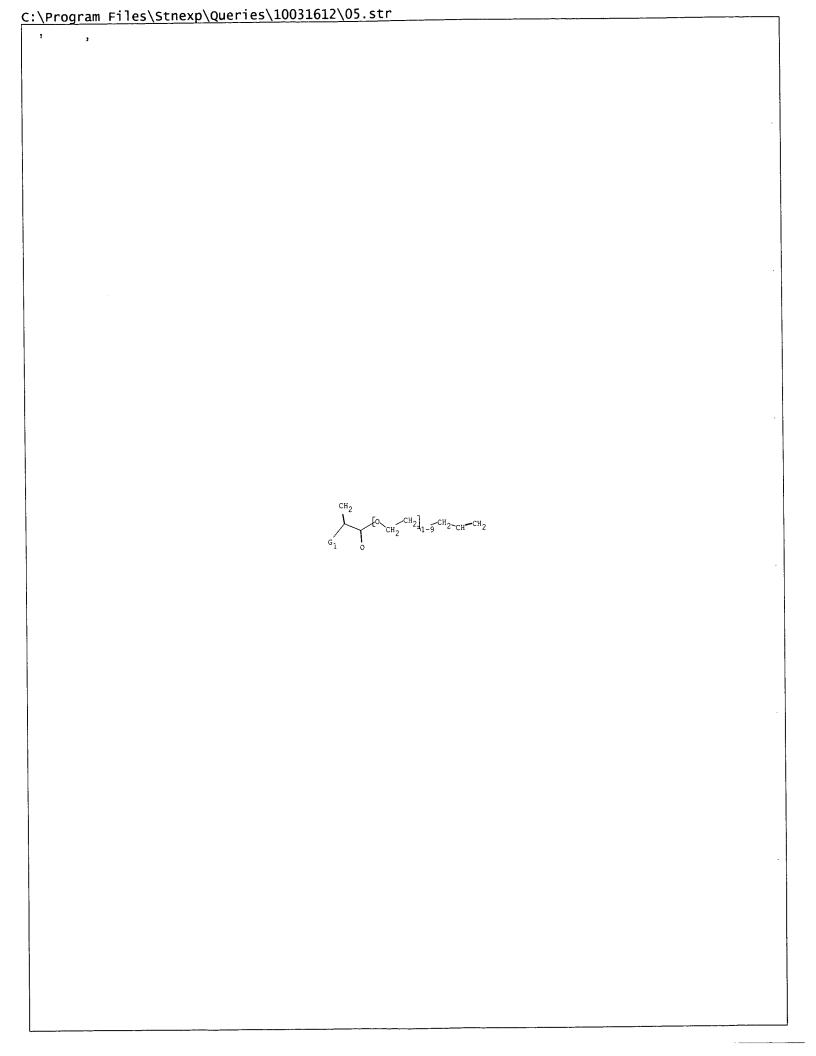
Page 18



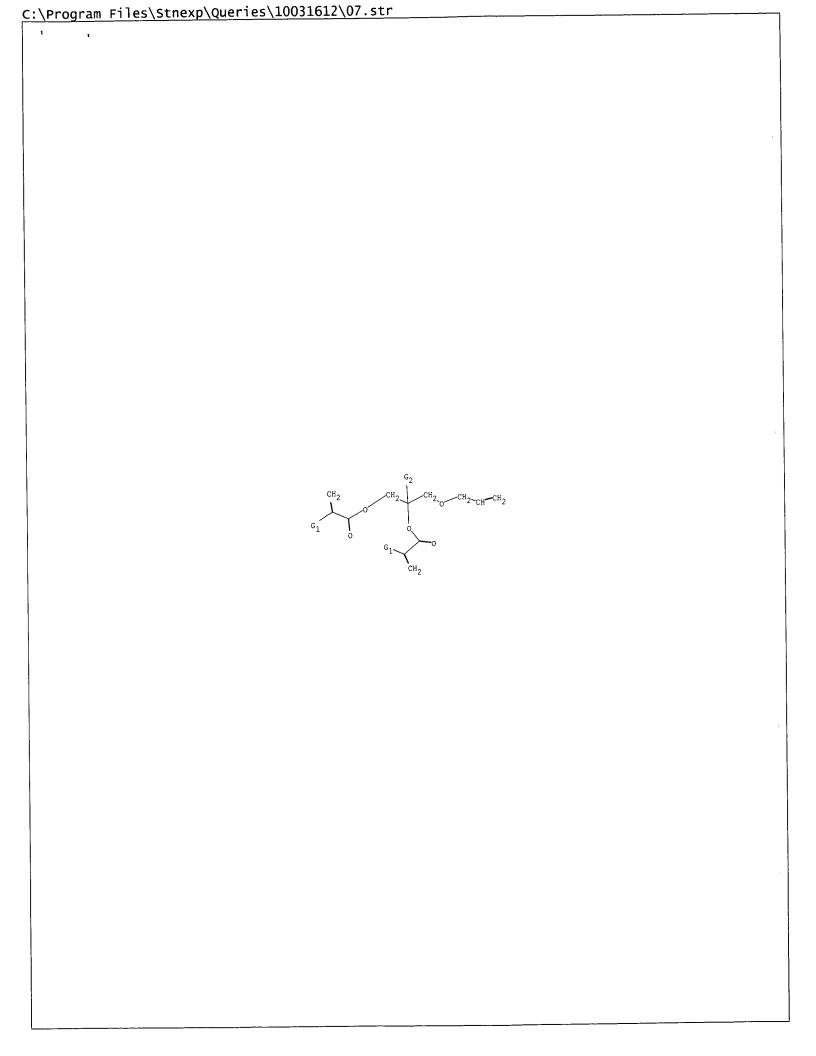


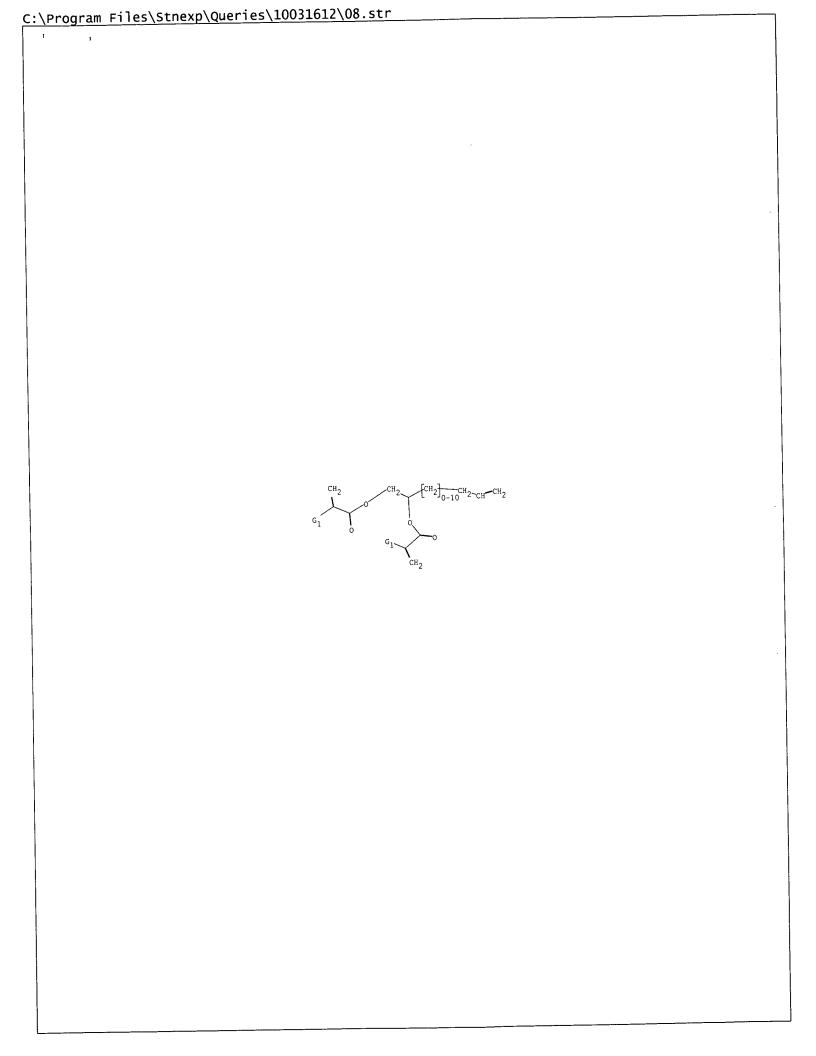


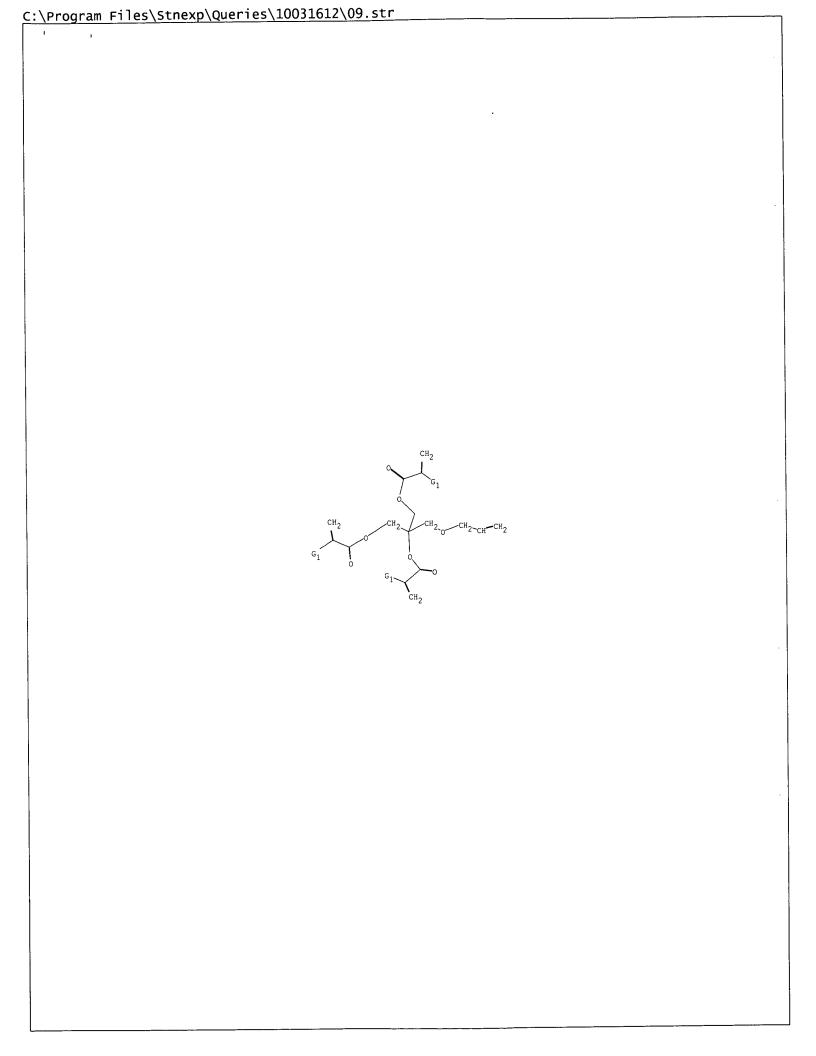


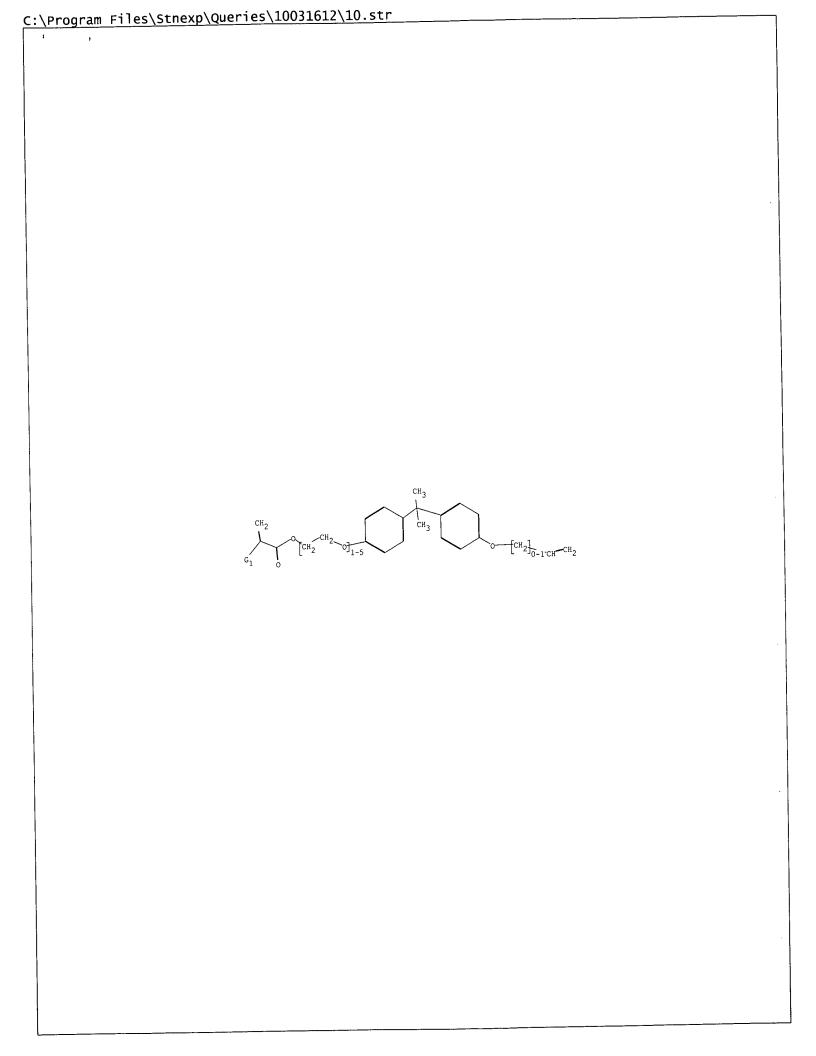


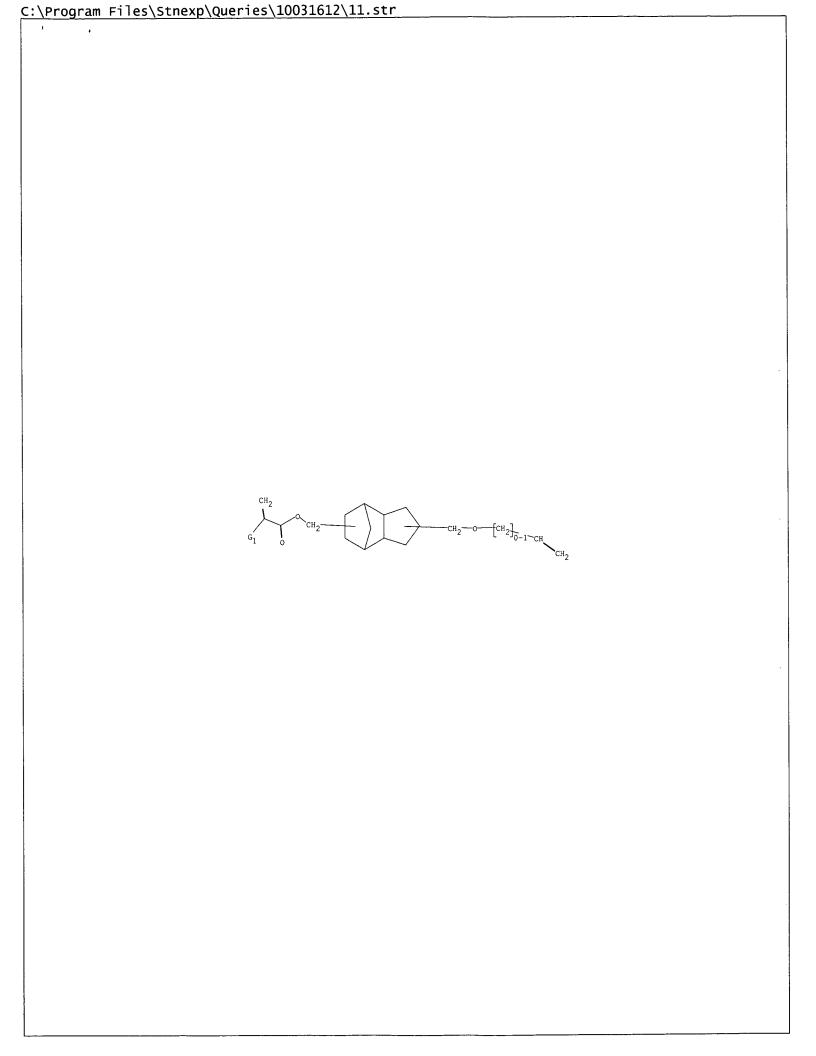


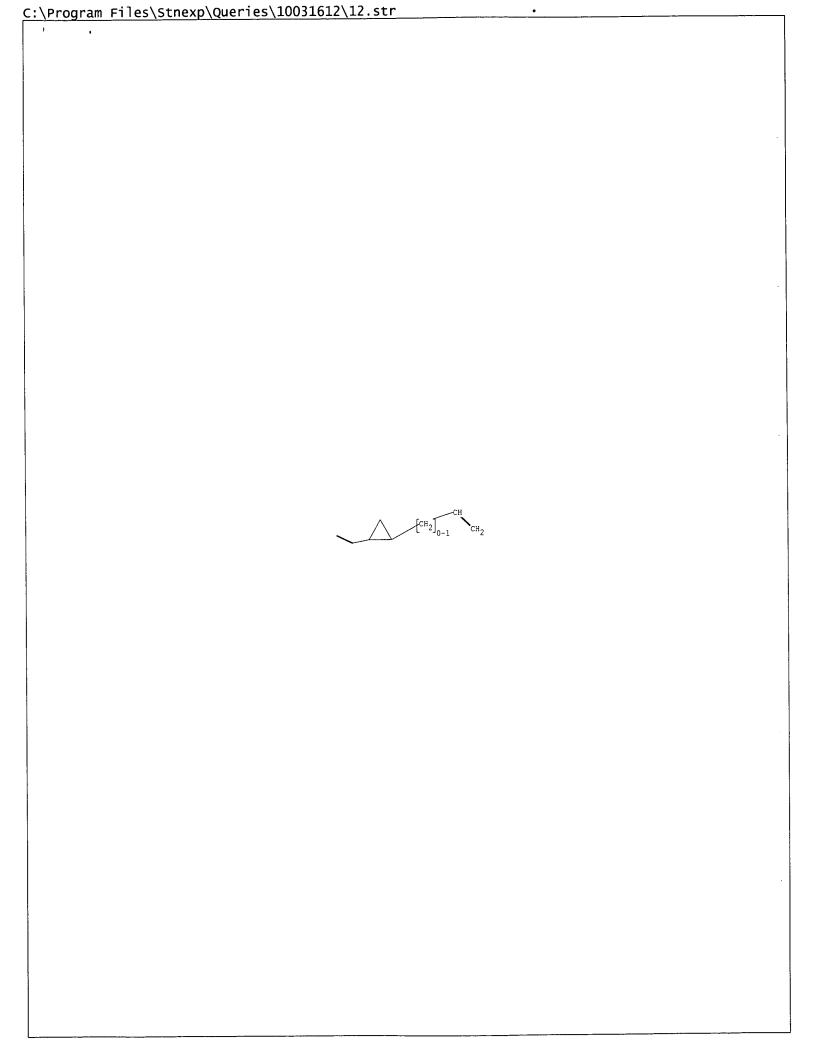


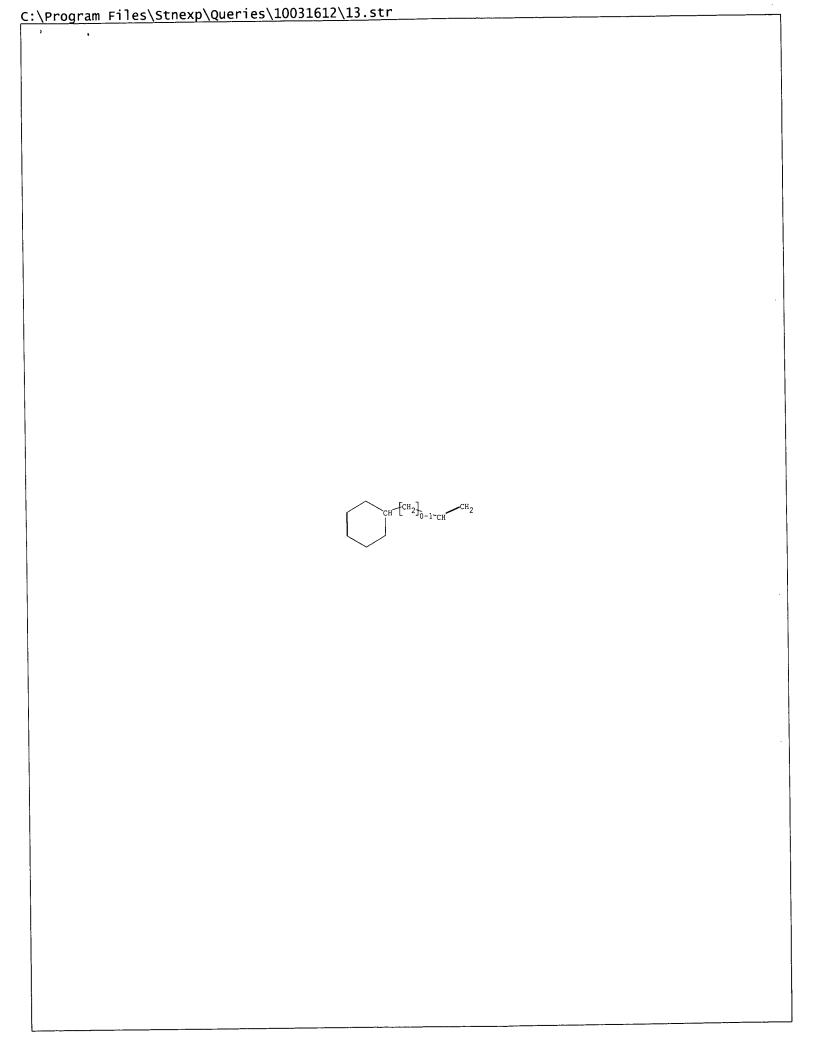


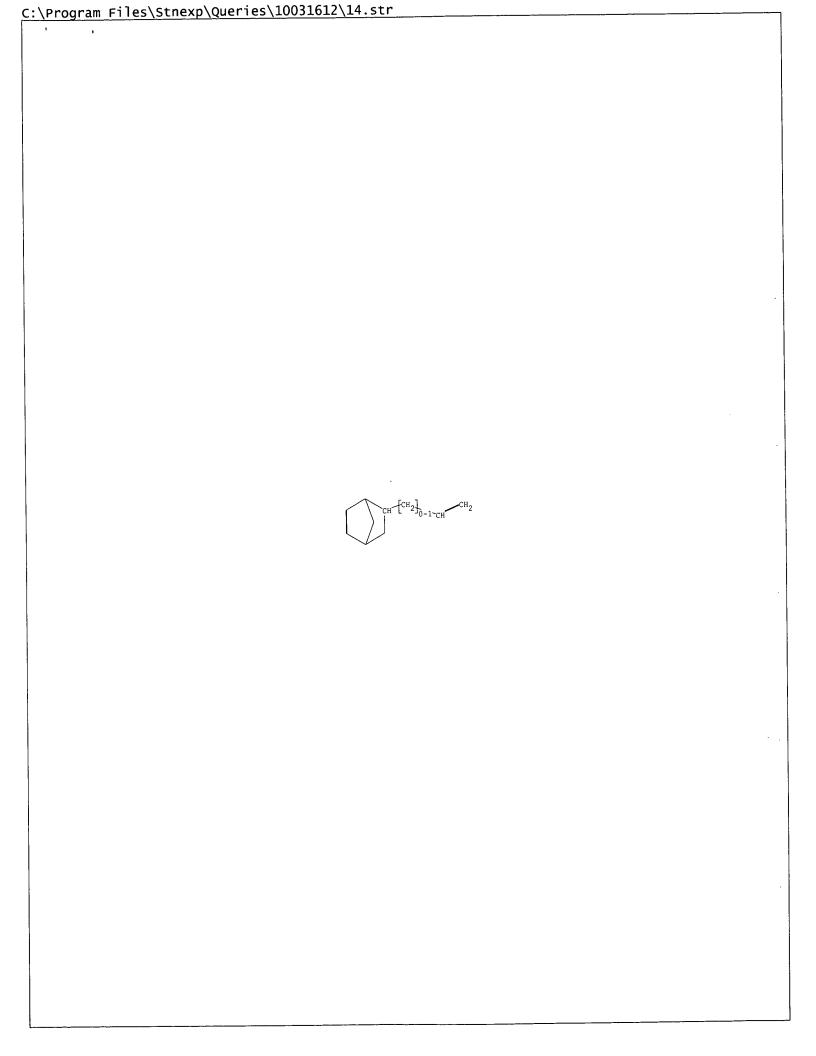


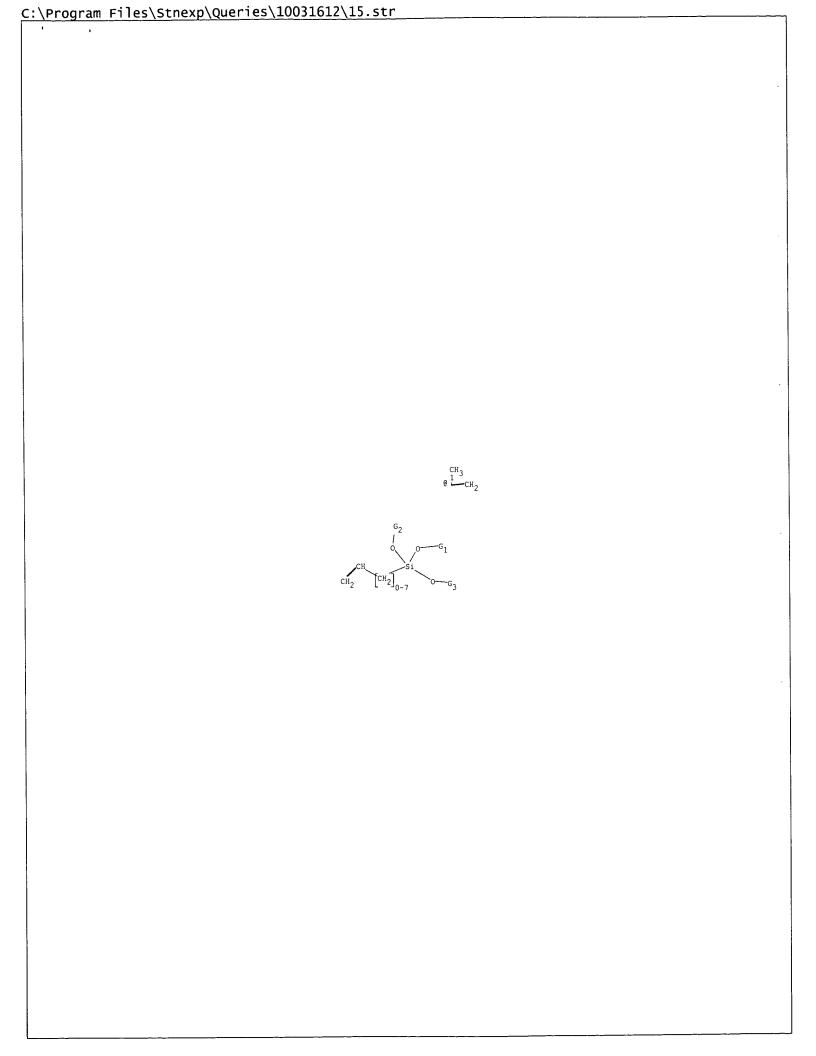


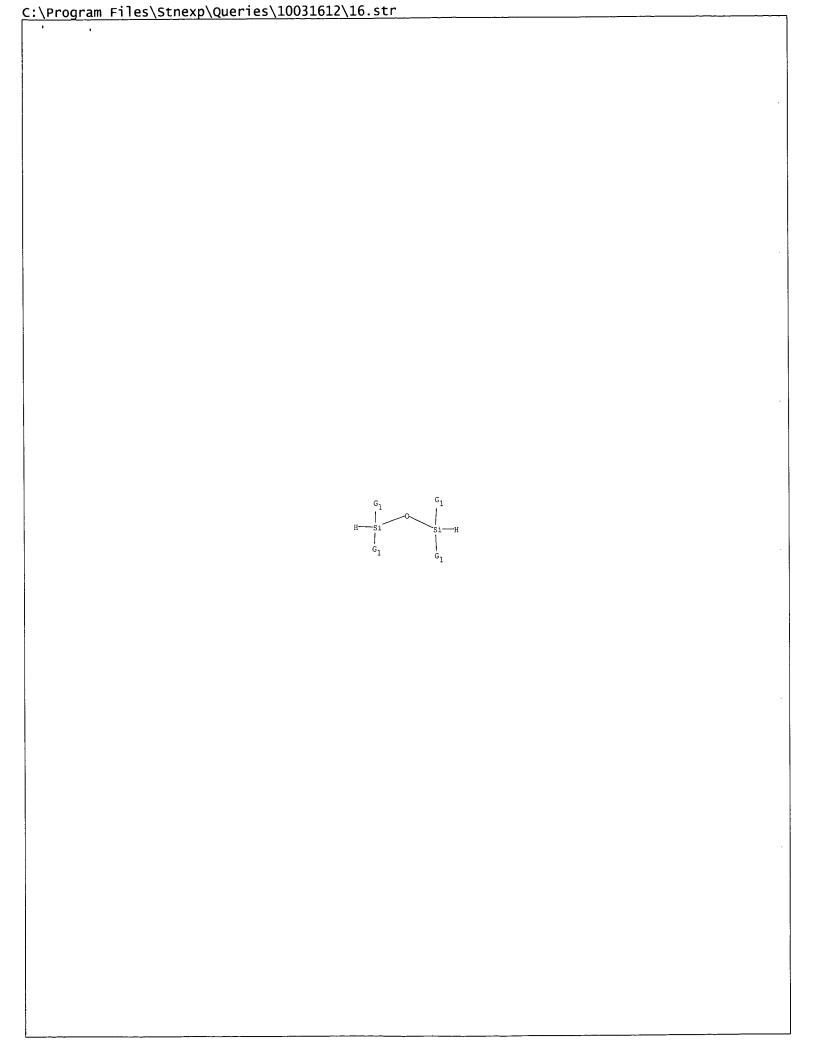


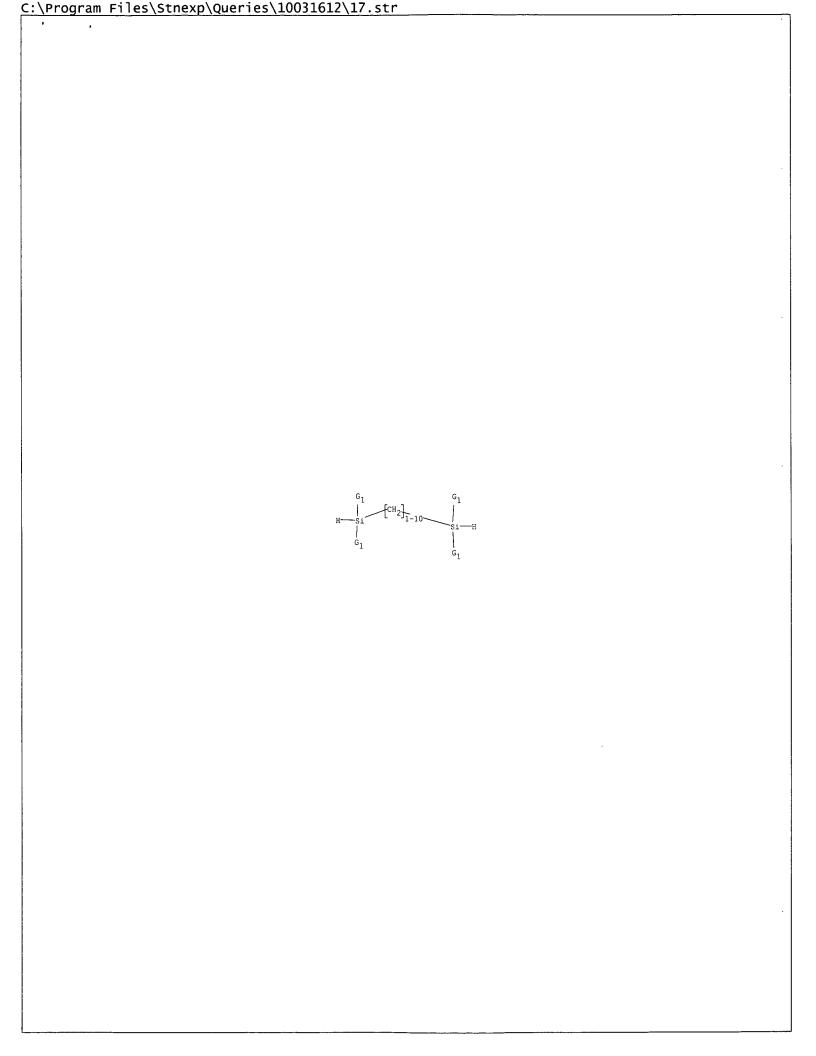


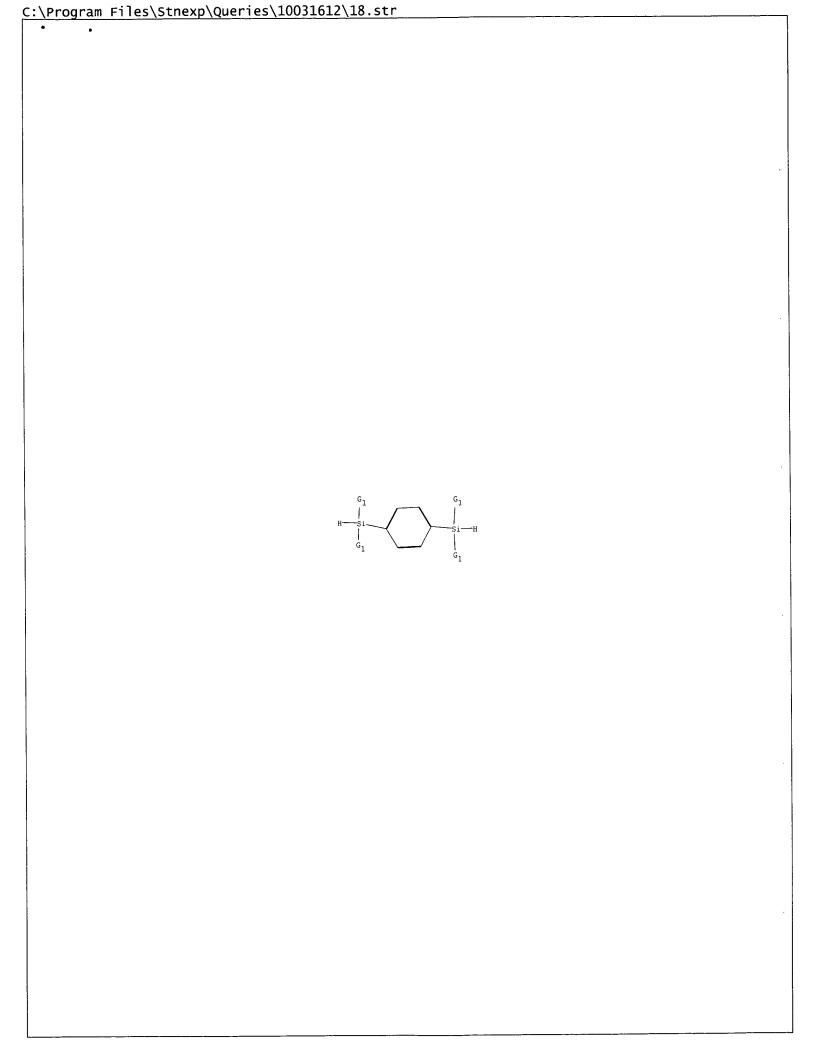


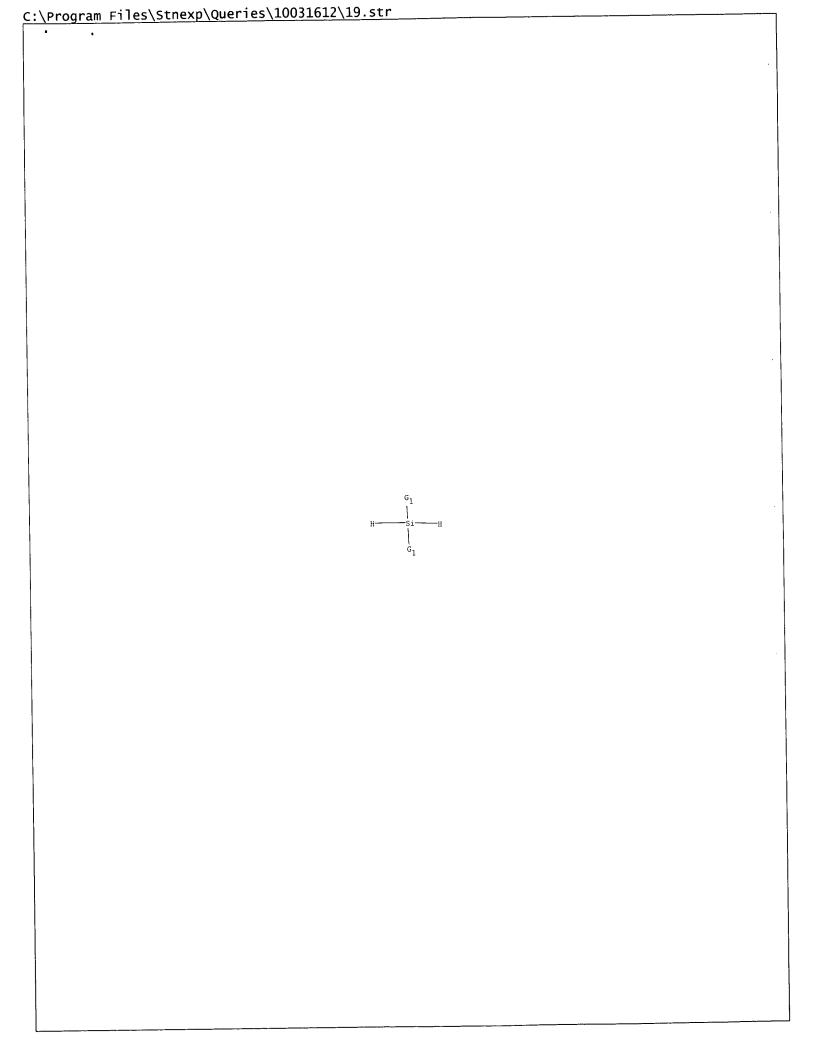












=> Uploading 01.str

## L1 STRUCTURE UPLOADED

=> s l1 exa sam

STRUCTURES CONTAINING VARIABLE NODES NOT VALID IN EXACT OR FAMILY SEARCH You have requested a full structure (EXA or FAM) search on a structure containing one of the special variable-atom symbols A, M, Q, or X, or a variable group G. Only bond variability is allowed in structures for EXA or FAM searches. Variable nodes are never permitted.

=> s l1 sam

SAMPLE SEARCH INITIATED 14:46:44 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 11 TO ITERATE

100.0% PROCESSED 11 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 22 TO 418 PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=>

Uploading 02.str

L3 STRUCTURE UPLOADED

=> s l1 full

FULL SEARCH INITIATED 14:47:40 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 177 TO ITERATE

100.0% PROCESSED 177 ITERATIONS 3 ANSWERS

SEARCH TIME: 00.00.01

L4 3 SEA SSS FUL L1

=> d scan

L4 3 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN 2-Propenoic acid, 2-methyl-, 12,12-dimethoxy-7,7,9,9-tetramethyl-3,8,13trioxa-7,9,12-trisilatetradec-1-yl ester (9CI)

MF C18 H40 O7 Si3

CI COM

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L4 3 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN 2-Propenoic acid, 2-methyl-, 12,12-dimethoxy-7,7,9,9-tetramethyl-3,8,13trioxa-7,9,12-trisilatetradec-1-yl ester, homopolymer (9CI)

MF (C18 H40 O7 Si3)x

CI PMS

CM 1

L4 3 ANSWERS REGISTRY COPYRIGHT 2003 ACS

IN 2-Propenoic acid, 2-methyl-, 12,12-dimethoxy-7,7,9,9-tetramethyl-3,8,13trioxa-7,9,12-trisilatetradec-1-yl ester, polymer with silicic acid
(H4SiO4) tetramethyl ester (9CI)

MF (C18 H40 O7 Si3 . C4 H12 O4 Si)x

CI PMS

CM 1

CM 2

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 149.75 150.38

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 14:48:31 ON 21 APR 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is

held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 21 Apr 2003 VOL 138 ISS 17 FILE LAST UPDATED: 20 Apr 2003 (20030420/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 14

L5 1 L4

=> d 15 ibib abs hitstr

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:62280 CAPLUS

DOCUMENT NUMBER: 134:136746

TITLE: Hydrolyzable and polymerizable silanes with low

viscosity and their use as dental materials

INVENTOR(S): Bissinger, Peter; Gasser, Oswald; Guggenberger,

Rainer; Soglowek, Wolfgang

PATENT ASSIGNEE(S): ESPE Dental A.-G., Germany

SOURCE: Ger. Offen., 20 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
KIND DATE
                                                             APPLICATION NO. DATE
       PATENT NO.
                                        _____
       _____
                               A1 20010125 DE 1999-19934407 19990722
A1 20010201 WO 2000-EP6639 20000712
       DE 19934407
       WO 2001007444
             W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                   CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                        EP 2000-951376 20000712
       EP 1202997
                                A1 20020508
             R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                   IE, SI, LT, LV, FI, RO, MK, CY, AL
       JP 2003505557
                               T2 20030212
                                                              JP 2001-512528
                                                                                         20000712
PRIORITY APPLN. INFO.:
                                                            DE 1999-19934407 A 19990722
                                                            WO 2000-EP6639 W 20000712
       The silanes have the structure Q(YdR'ZR'SiXaRb)c [Q = C4-50 org. residue
```

The silanes have the structure Q(YdR'ZR'SiXaRb)c [Q = C4-50 org. residue contg. .gtoreq.1 C-C double bond; R = alkyl, alkenyl, aryl, aralkyl, alkaryl; R' = direct link, C1-10 hydrocarbylene, optionally interrupted by O, S, and/or NH; X = H, halogen, OH, alkoxy, acyloxy, acyl, alkoxycarbonyl, NR12 (R1 = H, alkyl, aryl); Y = O, S, CO, CO2, OCO2, CONR1, NR1CO; Z = modified org. residue contg. Si or Ge; a = 1-3; b = (3 - a); c = 1-4; d = 0, 1]. Thus, hydrosilylation of 2-(allyloxy)ethyl methacrylate with 1,1,3,3-tetramethyl-1-[2-(trimethoxysilyl)ethyl]disiloxa ne gave CH2:CMeCO2(CH2)2O(CH2)3SiMe2OSiMe2(CH2)2Si(OMe)3 in 98% yield,

which could be hydrolytically homopolymd. in 96% yield or copolymd. with Si(OMe)4 in 95% yield.

## IT 321861-59-0P 321861-61-4P

RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(hydrolyzable and polymerizable silanes with low viscosity as dental materials)

# RN 321861-59-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 12,12-dimethoxy-7,7,9,9-tetramethyl-3,8,13trioxa-7,9,12-trisilatetradec-1-yl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 321861-57-8 CMF C18 H40 O7 Si3

# RN 321861-61-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 12,12-dimethoxy-7,7,9,9-tetramethyl-3,8,13-trioxa-7,9,12-trisilatetradec-1-yl ester, polymer with silicic acid (H4SiO4) tetramethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 321861-57-8 CMF C18 H40 O7 Si3

CM 2

CRN 681-84-5 CMF C4 H12 O4 Si

# IT 321861-57-8P

 $\begin{tabular}{ll} RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) \end{tabular}$ 

(prepn. of hydrolyzable and polymerizable silanes with low viscosity as

dental materials) RN 321861-57-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 12,12-dimethoxy-7,7,9,9-tetramethyl-3,8,13-trioxa-7,9,12-trisilatetradec-1-yl ester (9CI) (CA INDEX NAME)

=>

Uploading 02.str

L6 STRUCTURE UPLOADED

=> s 16 full

FULL SEARCH INITIATED 14:51:12 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 84 TO ITERATE

100.0% PROCESSED 84 ITERATIONS

0 ANSWERS

3 ANSWERS

SEARCH TIME: 00.00.01

L7 0 SEA SSS FUL L6

=>

Uploading 03.str

L8 STRUCTURE UPLOADED

=> s 18 full

FULL SEARCH INITIATED 14:51:45 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 698 TO ITERATE

100.0% PROCESSED 698 ITERATIONS

SEARCH TIME: 00.00.01

L9 3 SEA SSS FUL L8

=> file caplus

L10 1 L9

=> s 110 ibib abs hitstr
MISSING OPERATOR L10 IBIB
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> d l10 ibib abs hitstr

L10 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2001:62280 CAPLUS

DOCUMENT NUMBER:

134:136746

TITLE:

Hydrolyzable and polymerizable silanes with low viscosity and their use as dental materials

INVENTOR(S): Viscosity and Inventor(S): Bissinger, H

Bissinger, Peter; Gasser, Oswald; Guggenberger,

Rainer; Soglowek, Wolfgang

PATENT ASSIGNEE(S):

ESPE Dental A.-G., Germany

SOURCE:

Ger. Offen., 20 pp.

DOCUMENT TYPE:

CODEN: GWXXBX Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
                     ____
                                         DE 19934407 A1 20010125 DE 1999-19934407 19990722 WO 2001007444 A1 20010201 WO 2000-EP6639 20000712
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
            HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
            LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
            SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
            YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
            CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    EP 1202997
                     A1 20020508
                                      EP 2000-951376 20000712
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL
    JP 2003505557
                     T2 20030212
                                          JP 2001-512528 20000712
PRIORITY APPLN. INFO.:
                                       DE 1999-19934407 A 19990722
                                       WO 2000-EP6639 W 20000712
```

The silanes have the structure Q(YdR'ZR'SiXaRb)c [Q = C4-50 org. residue contg. .gtoreq.1 C-C double bond; R = alkyl, alkenyl, aryl, aralkyl, alkaryl; R' = direct link, C1-10 hydrocarbylene, optionally interrupted by O, S, and/or NH; X = H, halogen, OH, alkoxy, acyloxy, acyl, alkoxycarbonyl, NR12 (R1 = H, alkyl, aryl); Y = O, S, CO, CO2, O2C, OCO2, CONR1, NR1CO; Z = modified org. residue contg. Si or Ge; a = 1-3; b = (3 - a); c = 1-4; d = 0, 1]. Thus, hydrosilylation of 2-(allyloxy)ethyl methacrylate with 1,1,3,3-tetramethyl-1-[2-(trimethoxysilyl)ethyl]disiloxa ne gave CH2:CMeCO2(CH2)2O(CH2)3SiMe2OSiMe2(CH2)2Si(OMe)3 in 98% yield, which could be hydrolytically homopolymd. in 96% yield or copolymd. with Si(OMe)4 in 95% yield.

IT 321861-72-7P 321861-73-8P

RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(hydrolyzable and polymerizable silanes with low viscosity as dental materials)

RN 321861-72-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-(9,9-dimethoxy-6,6-dimethyl-2,10-dioxa-6,9-disilaundec-1-yl)-1,2-ethanediyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 321861-71-6 CMF C26 H42 O8 Si2

RN 321861-73-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 10,10-dimethoxy-7-methyl-1-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-7-phenyl-3,11-dioxa-7,10-disiladodec-1-yl ester, polymer with silicic acid (H4SiO4) tetramethyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 321861-71-6 CMF C26 H42 O8 Si2

CM 2

CRN 681-84-5 CMF C4 H12 O4 Si

IT 321861-71-6P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of hydrolyzable and polymerizable silanes with low viscosity as dental materials)

RN 321861-71-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1-(9,9-dimethoxy-6-methyl-6-phenyl-2,10-dioxa-6,9-disilaundec-1-yl)-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file registry

Uploading 04.str

L11 STRUCTURE UPLOADED

=> s l11 full FULL SEARCH INITIATED 14:53:38 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 821 TO ITERATE

100.0% PROCESSED 821 ITERATIONS 3 ANSWERS

SEARCH TIME: 00.00.01

L12 3 SEA SSS FUL L11

=> file caplus

=> s 112 L13 1 L12

=> d l12 ibib abs hitstr YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y) /N:n

=> file caplus

```
=> s 113
              1 L12
L14
```

## => d l14 ibib abs hitstr

L14 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2001:62280 CAPLUS

DOCUMENT NUMBER:

TITLE:

134:136746 Hydrolyzable and polymerizable silanes with low

viscosity and their use as dental materials Bissinger, Peter; Gasser, Oswald; Guggenberger,

INVENTOR(S): Rainer; Soglowek, Wolfgang

PATENT ASSIGNEE(S):

ESPE Dental A.-G., Germany Ger. Offen., 20 pp.

SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent German

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
APPLICATION NO. DATE
    PATENT NO.
                KIND DATE
    -----
                                       ______
    DE 19934407
                   A1
                         20010125
                                      DE 1999-19934407 19990722
                                      WO 2000-EP6639 20000712
    WO 2001007444
                   A1 20010201
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
           CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
           HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
           LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
           SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
           YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
           DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
           CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                      EP 2000-951376 20000712
                    A1 20020508
    EP 1202997
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL
    JP 2003505557
                   T2 20030212
                                       JP 2001-512528
                                                       20000712
                                    DE 1999-19934407 A 19990722
PRIORITY APPLN. INFO.:
                                    WO 2000-EP6639 W 20000712
```

The silanes have the structure Q(YdR'ZR'SiXaRb)c [Q = C4-50 org. residue contg. .gtoreq.1 C-C double bond; R = alkyl, alkenyl, aryl, aralkyl, alkaryl; R' = direct link, C1-10 hydrocarbylene, optionally interrupted by O, S, and/or NH; X = H, halogen, OH, alkoxy, acyloxy, acyl, alkoxycarbonyl, NR12 (R1 = H, alkyl, aryl); Y = O, S, CO, CO2, O2C, OCO2, CONR1, NR1CO; Z = modified org. residue contg. Si or Ge; a = 1-3; b = (3 a); c = 1-4; d = 0, 1]. Thus, hydrosilylation of 2-(allyloxy)ethyl methacrylate with 1,1,3,3-tetramethyl-1-[2-(trimethoxysilyl)ethyl]disiloxa ne gave CH2: CMeCO2(CH2)2O(CH2)3SiMe2OSiMe2(CH2)2Si(OMe)3 in 98% yield, which could be hydrolytically homopolymd. in 96% yield or copolymd. with Si(OMe)4 in 95% yield.

#### IT321861-75-0P 321861-76-1P

RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(hydrolyzable and polymerizable silanes with low viscosity as dental materials)

RN321861-75-0 CAPLUS

CN Disiloxane, 1-(2-bicyclo[2.2.1]hept-5-en-2-ylethyl)-1,1,3,3-tetramethyl-3-[2-(trimethoxysily1)ethy1]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 321861-74-9 CMF C18 H38 O4 Si3 RN 321861-76-1 CAPLUS
CN Silicic acid (H4SiO4), tetramethyl ester, polymer with 1-(2-bicyclo[2.2.1]hept-5-en-2-ylethyl)-1,1,3,3-tetramethyl-3-[2-(trimethoxysilyl)ethyl]disiloxane (9CI) (CA INDEX NAME)

CM 1

CRN 321861-74-9
CMF C18 H38 O4 Si3

CM 2
CRN 681-84-5
CMF C4 H12 O4 Si

IT 321861-74-9P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
 (prepn. of hydrolyzable and polymerizable silanes with low viscosity as
 dental materials)

RN 321861-74-9 CAPLUS

CN Disiloxane, 1-(2-bicyclo[2.2.1]hept-5-en-2-ylethyl)-1,1,3,3-tetramethyl-3-[2-(trimethoxysilyl)ethyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> log y

Uploading 05.str

L1 STRUCTURE UPLOADED

=> s l1 full

FULL SEARCH INITIATED 14:57:01 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 59310 TO ITERATE

100.0% PROCESSED 59310 ITERATIONS

143 ANSWERS

SEARCH TIME: 00.00.02

L2 143 SEA SSS FUL L1

=>

Uploading 06.str

L3 STRUCTURE UPLOADED

=> s 13 full

FULL SEARCH INITIATED 14:57:48 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 161273 TO ITERATE

100.0% PROCESSED 161273 ITERATIONS

56 ANSWERS

1 ANSWERS

0 ANSWERS

SEARCH TIME: 00.00.03

L4 56 SEA SSS FUL L3

=>

Uploading 07.str

L5 STRUCTURE UPLOADED

=> s 15 full

FULL SEARCH INITIATED 14:58:19 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 11914 TO ITERATE

100.0% PROCESSED 11914 ITERATIONS

SEARCH TIME: 00.00.01

L6 1 SEA SSS FUL L5

=>

Uploading 08.str

L7 STRUCTURE UPLOADED

=> s 17 full

FULL SEARCH INITIATED 14:58:47 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 12021 TO ITERATE

100.0% PROCESSED 12021 ITERATIONS

SEARCH TIME: 00.00.01

L8 0 SEA SSS FUL L7

=>

Uploading 09.str

L9 STRUCTURE UPLOADED

=> s 19 full

FULL SEARCH INITIATED 14:59:40 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 246 TO ITERATE

100.0% PROCESSED 246 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L10 0 SEA SSS FUL L9

=>

Uploading 10.str

L11 STRUCTURE UPLOADED

=> s 111 full

FULL SEARCH INITIATED 15:00:13 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2869 TO ITERATE

100.0% PROCESSED 2869 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L12 0 SEA SSS FUL L11

=>

Uploading 11.str

L13 STRUCTURE UPLOADED

=> s 113 full

FULL SEARCH INITIATED 15:00:54 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 7634 TO ITERATE

100.0% PROCESSED 7634 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L14 0 SEA SSS FUL L13

=>

Uploading 12.str

L15 STRUCTURE UPLOADED

=> s l15 full

FULL SEARCH INITIATED 15:01:15 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 14929 TO ITERATE

100.0% PROCESSED 14929 ITERATIONS 149 ANSWERS

SEARCH TIME: 00.00.01

L16 149 SEA SSS FUL L15

=>

Uploading 13.str

L17 STRUCTURE UPLOADED

=> s 117 full

FULL SEARCH INITIATED 15:01:40 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - >1,000,000 TO ITERATE

< 22.8% PROCESSED 400000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.07

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*

BATCH \*\*INCOMPLETE\*\*

141 ANSWERS

PROJECTED ITERATIONS: EXCEEDS 1000000

PROJECTED ANSWERS: EXCEEDS 545

L18 141 SEA SSS FUL L17

=>

Uploading 14.str

L19 STRUCTURE UPLOADED

=> s l19 full

FULL SEARCH INITIATED 15:02:11 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 356733 TO ITERATE

100.0% PROCESSED 356733 ITERATIONS ( 1 INCOMPLETE) 291 ANSWERS

SEARCH TIME: 00.00.03

L20 291 SEA SSS FUL L19

Uploading 05.str

L1 STRUCTURE UPLOADED

=> s l1 full

FULL SEARCH INITIATED 14:57:01 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 59310 TO ITERATE

100.0% PROCESSED 59310 ITERATIONS

SEARCH TIME: 00.00.02

L2 143 SEA SSS FUL L1

=>

Uploading 06.str

L3 STRUCTURE UPLOADED

=> s 13 full

FULL SEARCH INITIATED 14:57:48 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 161273 TO ITERATE

100.0% PROCESSED 161273 ITERATIONS 56 ANSWERS

143 ANSWERS

0 ANSWERS

SEARCH TIME: 00.00.03

L4 56 SEA SSS FUL L3

=>

Uploading 07.str

L5 STRUCTURE UPLOADED

=> s 15 full

FULL SEARCH INITIATED 14:58:19 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 11914 TO ITERATE

100.0% PROCESSED 11914 ITERATIONS 1 ANSWERS

SEARCH TIME: 00.00.01

L6 1 SEA SSS FUL L5

=>

Uploading 08.str

L7 STRUCTURE UPLOADED

=> s 17 full

FULL SEARCH INITIATED 14:58:47 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 12021 TO ITERATE

100.0% PROCESSED 12021 ITERATIONS

SEARCH TIME: 00.00.01

L8 0 SEA SSS FUL L7

=>

Uploading 09.str

L9 STRUCTURE UPLOADED

=> s 19 full

FULL SEARCH INITIATED 14:59:40 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 246 TO ITERATE

100.0% PROCESSED 246 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L10 0 SEA SSS FUL L9

=>

Uploading 10.str

L11 STRUCTURE UPLOADED

=> s 111 full

FULL SEARCH INITIATED 15:00:13 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2869 TO ITERATE

100.0% PROCESSED 2869 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L12 0 SEA SSS FUL L11

=>

Uploading 11.str

L13 STRUCTURE UPLOADED

=> s l13 full

FULL SEARCH INITIATED 15:00:54 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 7634 TO ITERATE

100.0% PROCESSED 7634 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L14 0 SEA SSS FUL L13

=>

Uploading 12.str

L15 STRUCTURE UPLOADED

=> s 115 full

FULL SEARCH INITIATED 15:01:15 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 14929 TO ITERATE

100.0% PROCESSED 14929 ITERATIONS 149 ANSWERS

SEARCH TIME: 00.00.01

L16 149 SEA SSS FUL L15

=>

Uploading 13.str

L17 STRUCTURE UPLOADED

=> s 117 full

FULL SEARCH INITIATED 15:01:40 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - >1,000,000 TO ITERATE

< 22.8% PROCESSED 400000 ITERATIONS 141 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.07

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*
BATCH \*\*INCOMPLETE\*\*

PROJECTED ITERATIONS: EXCEEDS 1000000

141 SEA SSS FUL L17 L18

Uploading 14.str

STRUCTURE UPLOADED L19

=> s 119 full

FULL SEARCH INITIATED 15:02:11 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 356733 TO ITERATE

100.0% PROCESSED 356733 ITERATIONS ( 1 INCOMPLETE) 291 ANSWERS

SEARCH TIME: 00.00.03

T<sub>1</sub>2.0 291 SEA SSS FUL L19

=> d his

L3

L5

(FILE 'HOME' ENTERED AT 14:56:08 ON 21 APR 2003)

FILE 'REGISTRY' ENTERED AT 14:56:21 ON 21 APR 2003

L1 STRUCTURE UPLOADED

L2143 S L1 FULL

STRUCTURE UPLOADED

56 S L3 FULL L4

STRUCTURE UPLOADED

L6 1 S L5 FULL

STRUCTURE UPLOADED

L7 L8 0 S L7 FULL

STRUCTURE UPLOADED

L9 L10 0 S L9 FULL

L11STRUCTURE UPLOADED

L12 0 S L11 FULL

STRUCTURE UPLOADED L13

L14 0 S L13 FULL

L15 STRUCTURE UPLOADED

L16 149 S L15 FULL

STRUCTURE UPLOADED L17

L18 141 S L17 FULL

STRUCTURE UPLOADED L19

L20 291 S L19 FULL

=> s 12 or 14 or 16 or 18 or 110 or 112 or 114 or 116 or 118 or 120 758 L2 OR L4 OR L6 OR L8 OR L10 OR L12 OR L14 OR L16 OR L18 OR L20

=> d his

L3

L5

(FILE 'HOME' ENTERED AT 14:56:08 ON 21 APR 2003)

FILE 'REGISTRY' ENTERED AT 14:56:21 ON 21 APR 2003

STRUCTURE UPLOADED L1

L2143 S L1 FULL

STRUCTURE UPLOADED

L456 S L3 FULL

STRUCTURE UPLOADED

L6 1 S L5 FULL

STRUCTURE UPLOADED

L7L80 S L7 FULL

STRUCTURE UPLOADED

L9 L100 S L9 FULL

L11STRUCTURE UPLOADED

0 S L11 FULL L12

L13 STRUCTURE UPLOADED L14 0 S L13 FULL L15 STRUCTURE UPLOADED STRUCTURE ( 149 S L15 FULL L16 STRUCTURE UPLOADED L17 141 S L17 FULL L18 STRUCTURE UPLOADED L19 291 S L19 FULL L20 758 S L2 OR L4 OR L6 OR L8 OR L10 OR L12 OR L14 OR L16 OR L18 OR L2 L21 => Uploading 16.str STRUCTURE UPLOADED => s 122 full FULL SEARCH INITIATED 15:03:51 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 45427 TO ITERATE 100.0% PROCESSED 45427 ITERATIONS 381 ANSWERS SEARCH TIME: 00.00.01 L23 381 SEA SSS FUL L22 => Uploading 17.str L24 STRUCTURE UPLOADED => s 124 full FULL SEARCH INITIATED 15:04:13 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 204804 TO ITERATE 100.0% PROCESSED 204804 ITERATIONS 82 ANSWERS SEARCH TIME: 00.00.05 L25 82 SEA SSS FUL L24 Uploading 18.str STRUCTURE UPLOADED L26 => s 126 full FULL SEARCH INITIATED 15:04:43 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 8145 TO ITERATE 100.0% PROCESSED 8145 ITERATIONS 215 ANSWERS SEARCH TIME: 00.00.01 L27 215 SEA SSS FUL L26 => Uploading 19.str STRUCTURE UPLOADED L2.8 => s 128 full FULL SEARCH INITIATED 15:05:06 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - >1,000,000 TO ITERATE < 38.5% PROCESSED 400000 ITERATIONS 510 ANSWERS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.15

```
FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**

PROJECTED ITERATIONS: EXCEEDS 1000000

PROJECTED ANSWERS: EXCEEDS 1217
```

L29 510 SEA SSS FUL L28

=> d his

(FILE 'HOME' ENTERED AT 14:56:08 ON 21 APR 2003)

```
FILE 'REGISTRY' ENTERED AT 14:56:21 ON 21 APR 2003
             STRUCTURE UPLOADED
L1
L2
          143 S L1 FULL
L3
              STRUCTURE UPLOADED
L4
           56 S L3 FULL
L5
              STRUCTURE UPLOADED
L6
            1 S L5 FULL
L7
              STRUCTURE UPLOADED
L8
            0 S L7 FULL
L9
             STRUCTURE UPLOADED
L10
           0 S L9 FULL
L11
            STRUCTURE UPLOADED
           0 S L11 FULL
L12
L13
            STRUCTURE UPLOADED
L14
            0 S L13 FULL
L15
             STRUCTURE UPLOADED
      149 S L15 FULL
L16
L17
             STRUCTURE UPLOADED
        141 S L17 FULL
L18
              STRUCTURE UPLOADED
L19
         291 S L19 FULL
L20
L21
         758 S L2 OR L4 OR L6 OR L8 OR L10 OR L12 OR L14 OR L16 OR L18 OR L2
L22
              STRUCTURE UPLOADED
         381 S L22 FULL
L23
              STRUCTURE UPLOADED
L24
L25
          82 S L24 FULL
L26
              STRUCTURE UPLOADED
L27
          215 S L26 FULL
             STRUCTURE UPLOADED
L28
L29
          510 S L28 FULL
=> s 123 or 125 or 127 or 129
L30 1186 L23 OR L25 OR L27 OR L29
=> d his
```

(FILE 'HOME' ENTERED AT 14:56:08 ON 21 APR 2003)

	FILE	'REGIS	STRY	ENTER	ED AT	14:56:21	ON	21	APR	2003
L1			STRU	CTURE	UPLOAI	DED				
L2		143	S L1	FULL						
L3			STRU	CTURE	UPLOAI	DED				
L4		56	S L3	FULL						
L5			STRU	CTURE	UPLOAI	DED				
L6		1	S L5	FULL						
L7			STRU	CTURE	UPLOAI	DED				
L8		0	S L7	FULL						
Ь9			STRU	CTURE	UPLOAI	DED				
L10		0	S L9	FULL						
L11			STRU	CTURE	UPLOAI	DED				
L12		0	S L1	1 FULL	t					
L13			STRU	CTURE	UPLOAI	DED				

```
L14
            0 S L13 FULL
              STRUCTURE UPLOADED
          149 S L15 FULL
              STRUCTURE UPLOADED
L17
L18
          141 S L17 FULL
L19
              STRUCTURE UPLOADED
          291 S L19 FULL
L20
          758 S L2 OR L4 OR L6 OR L8 OR L10 OR L12 OR L14 OR L16 OR L18 OR L2
L21
               STRUCTURE UPLOADED
L22
          381 S L22 FULL
L23
L24
              STRUCTURE UPLOADED
L25
           82 S L24 FULL
L26
              STRUCTURE UPLOADED
L27
          215 S L26 FULL
L28
              STRUCTURE UPLOADED
          510 S L28 FULL
L29
          1186 S L23 OR L25 OR L27 OR L29
L30
=>
Uploading 15.str
L31
      STRUCTURE UPLOADED
=> s 131 full
FULL SEARCH INITIATED 15:06:31 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 42150 TO ITERATE
100.0% PROCESSED 42150 ITERATIONS
                                                         1719 ANSWERS
SEARCH TIME: 00.00.01
L32
         1719 SEA SSS FUL L31
=> d his
     (FILE 'HOME' ENTERED AT 14:56:08 ON 21 APR 2003)
    FILE 'REGISTRY' ENTERED AT 14:56:21 ON 21 APR 2003
L1
               STRUCTURE UPLOADED
L2
           143 S L1 FULL
L3
               STRUCTURE UPLOADED
L4
            56 S L3 FULL
L5
              STRUCTURE UPLOADED
L6
             1 S L5 FULL
L7
              STRUCTURE UPLOADED
L8
            0 S L7 FULL
L9
             STRUCTURE UPLOADED
L10
            0 S L9 FULL
L11
             STRUCTURE UPLOADED
L12
            0 S L11 FULL
L13
             STRUCTURE UPLOADED
L14
            0 S L13 FULL
L15
              STRUCTURE UPLOADED
L16
          149 S L15 FULL
L17
              STRUCTURE UPLOADED
L18
          141 S L17 FULL
L19
              STRUCTURE UPLOADED
L20
          291 S L19 FULL
L21
           758 S L2 OR L4 OR L6 OR L8 OR L10 OR L12 OR L14 OR L16 OR L18 OR L2
L22
              STRUCTURE UPLOADED
L23
          381 S L22 FULL
L24
              STRUCTURE UPLOADED
L25
           82 S L24 FULL
L26
              STRUCTURE UPLOADED
L27
          215 S L26 FULL
```

L28	STRUCTURE UPLOADED
L29	510 S L28 FULL
L30	1186 S L23 OR L25 OR L27 OR L29
L31	STRUCTURE UPLOADED
L32	1719 S L31 FULL

=> file caplus

4 . . . .

=> s 121 (L) 130 1128 L21

1691 L30

L33 4 L21 (L) L30

=> s 133 (L)132

6383 L32

L34 0 L33 (L)L32

=> s 121 and 130 and 132

1128 L21

1691 L30

6383 L32

L35 0 L21 AND L30 AND L32

=> log y

39	38	37	36	35	34	33	32	31	
133300	1643	7706	12	471	126551	1456	15	4537	Hits
(allyloxyethylmethacrylate or allyloxy adj allyloxyethylacrylate or allyloxy adj meth adj acrylate) or (allyl near3 (methacryloxypolyoxyethylene or methyacryloxypoly adj ethylene oxide)) or (glycerol near3dimethacrylate near3 allylether) or norborene or (vinyl adj norborene) or (trimethylolpropanetriacrylate or trimethylolpropane adj triacrylate)	vinyl adj cyclohexene	trimethylolpropanetriacrylate or trimethylolpropane adj triacrylate	vinyl adj norborene	norborene	glycerol near3dimethacrylate near3 allylether	allyl near3 (methacryloxypolyoxyethylene or methyacryloxypoly adj ethylene oxide)	allyloxyethylmethacrylate or allyloxy adj allyloxyethylacrylate or allyloxy adj meth adj acrylate	tetramethyldisiloxane or (di adj dimethylsilyl) adj (alkane or methane or ethane or propane or butane or pentane or hexane or heptane or octane or nonane or decane or benzene)) or (dialkylsilane or dimethylsilane or diarylsilane)	Search Text
USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	DBs

44	43	4 2 2	4 1	4 0	
1827	650	ω 4	134067	134472	Hits
(528/32).CCLS.	(528/12).CCLS.	(tetramethyldisiloxane or ((di adj dimethylsilyl) adj (alkane or methane or ethane or propane or butane or pentane or hexane or heptane or octane or nonane or decane or benzene)) or (dialkylsilane or dimethylsilane or diarylsilane)) same ((allyloxyethylmethacrylate or allyloxy adj meth adj acrylate) or (allyl near3 (methacryloxypolyoxyethylene or methyacryloxypoly adj ethylene oxide)) or (glycerol near3dimethacrylate near3 allylether) or (vinyl adj norborene) or (trimethylolpropanetriacrylate or trimethylolpropane adj triacrylate) or (vinyl adj cyclohexene))	(allyloxyethylmethacrylate or allyloxy adj allyloxyethylacrylate or allyloxy adj meth adj acrylate) or (allyl near3 (methacryloxypolyoxyethylene or methyacryloxypoly adj ethylene oxide)) or (glycerol near3dimethacrylate near3 allylether) or (vinyl adj norborene) or (trimethylolpropanetriacrylate or trimethylolpropane adj triacrylate) or (vinyl adj cyclohexene)	((allyloxyethylmethacrylate or allyloxyethylacrylate or allyloxy adj meth adj acrylate) or (allyl near3 (methacryloxypolyoxyethylene or methyacryloxypoly adj ethylene oxide)) or (glycerol near3dimethacrylate near3 allylether) or norborene or (vinyl adj norborene) or (trimethylolpropanetriacrylate or trimethylolpropane adj triacrylate)) or (vinyl adj cyclohexene)	Search Text
USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	DBs

	Hits	Search Text	DBs
45	499	(528/41).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB
46	1520	(526/279).CCLS.	USPAT; US-PGPUB; EPO;
			OFC; CERMENT; LDM_105
7	1176		USPAT; US-PGPUB; EPO;
,	H + 7 O		JPO; DERWENT; IBM_TDB
0	1160	(106/3E) CCT S	USPAT; US-PGPUB; EPO;
0,1	++00		JPO; DERWENT; IBM_TDB
	ა თ л	(133 /336) CCI S	USPAT; US-PGPUB; EPO;
7	200	•	JPO; DERWENT; IBM_TDB
50	221	(433/217.1).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB